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FINAL REPORT
OF
GEN. JOHN J. PERSHING

COMMANDER-IN-CHIEF
AMERICAN EXPEDITIONARY FORCES



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FINAL REPORT OF GEN. JOHN J. PERSHING.

GENERAL HEADQUARTERS AMERICAN EXPEDITIONARY FORCES,
September 1, 1919.

To the SECRETARY OF WAR.

SIR: I have the honor to submit herewith my final report as Commander-in-Chief of the American Expeditionary Forces in Europe.

PART I.

PERIOD OF ORGANIZATION.

1. I assumed the duties of this office on May 26, 1917, and, accompanied by a small staff, departed for Europe on board the S. S. *Baltic* May 28. We arrived at London on June 9 and, after spending some days in consultation with the British authorities, reached Paris on June 13.

2. Following the rather earnest appeals of the Allies for American troops, it was decided to send to France, at once, 1 complete division and 9 newly organized regiments of Engineers. The division was formed of regular regiments, necessary transfers of officers and men were made, and recruits were assigned to increase these units to the required strength.

The offer by the Navy Department of one regiment of Marines to be reorganized as Infantry was accepted by the Secretary of War, and it became temporarily a part of the First Division.

Prior to our entrance into the war, the regiments of our small army were very much scattered, and we had no organized units, even approximating a division, that could be sent overseas prepared to take the field. To meet the new conditions of warfare an entirely new organization was adopted in which our Infantry divisions were to consist of 4 regiments of Infantry of about treble their original size, 3 regiments of Artillery, 14 machine-gun companies, 1 Engineer regiment, 1 Signal battalion, 1 troop of Cavalry, and other auxiliary units, making a total strength of about 28,000 men.

MILITARY SITUATION.

3. In order that the reasons for many important decisions reached in the early history of the American Expeditionary Forces may be more clearly understood and the true value of the American effort more fully appreciated, it is desirable to have in mind the main events leading up to the time of our entry into the war.

1914.

4. Although the German drive of 1914 had failed in its immediate purpose, yet her armies had made very important gains. German forces were in complete possession of Belgium and occupied rich industrial regions of northern France, embracing one-fourteenth of her population and about three-fourths of her coal and iron. The German armies held a strongly fortified line 468 miles in length, stretching from the Swiss border to Nieuport on the English Channel; her troops were within 48 miles of Paris and the initiative remained in German hands.

In the east the rapidity of the Russian mobilization forced Germany, even before the Battle of the Marne, to send troops to that frontier, but the close of 1914 found the Russian armies ejected from East Prussia and driven back on Warsaw.

The entry of Turkey into the war, because of the moral effect upon the Moslem world and the immediate constant threat created against Allied communications with the Far East, led to an effort by the Allies in the direction of the Dardanelles.

1915.

5. Italy joined the Allies in May and gave their cause new strength, but the effect was more or less offset when Bulgaria entered on the side of the Central Powers.

The threatening situation on the Russian front and in the Balkans was still such that Germany was compelled to exert an immediate offensive effort in those directions and to maintain only a defensive attitude on the western front. German arms achieved a striking series of successes in the vicinity of the Mazurian Lakes and in Galicia, capturing Warsaw, Brest-Litovsk, and Vilna. The Central Powers overran Serbia and Montenegro. Meanwhile, the Italian armies forced Austria to use approximately one-half of her strength against them.

In the west, the French and British launched offensives which cost the German armies considerable loss; but the objectives were limited and the effect was local.

The Dardanelles expedition, having failed in its mission, was withdrawn in January, 1916. In Mesopotamia the Allied operations had

not been successful. Although the British fleet had established its superiority on the sea, yet the German submarine blockade had developed into a serious menace to Allied shipping.

1916.

6. Germany no doubt believed that her advantage on the eastern front at the close of 1915 again warranted an offensive in the west, and her attack against Verdun was accordingly launched in the spring of 1916. But Russia was not yet beaten and early in June, aided at the same time by the threat of an Italian offensive in the west, she began the great drive in Galicia that proved so disastrous to Austria.

Roumania, having entered on the side of the Allies, undertook a promising offensive against Austria. The British and French Armies attacked along the Somme. Germany quickly returned to the defensive in the west, and in September initiated a campaign in the east which, before the close of 1916, proved unfortunate for Russia as well as Roumania.

SPRING OF 1917.

7. Retaining on the eastern front the forces considered sufficient for the final conquest of Russia, Germany prepared to aid Austria in an offensive against Italy. Meanwhile, the Russian revolution was well under way and, by the midsummer of 1917, the final collapse of that government was almost certain.

The relatively low strength of the German forces on the western front led the Allies with much confidence to attempt a decision on this front; but the losses were very heavy and the effort signally failed. The failure caused a serious reaction especially on French morale, both in the army and throughout the country, and attempts to carry out extensive or combined operations were indefinitely suspended.

In the five months ending June 30, German submarines had accomplished the destruction of more than three and one-quarter million tons of Allied shipping. During three years Germany had seen practically all her offensives except Verdun crowned with success. Her battle lines were held on foreign soil and she had withstood every Allied attack since the Marne. The German general staff could now foresee the complete elimination of Russia, the possibility of defeating Italy before the end of the year and, finally, the campaign of 1918 against the French and British on the western front which might terminate the war.

It can not be said that German hopes of final victory were extravagant, either as viewed at that time or as viewed in the light of

history. Financial problems of the Allies were difficult, supplies were becoming exhausted and their armies had suffered tremendous losses. Discouragement existed not only among the civil population but throughout the armies as well. Such was the Allied morale that, although their superiority on the western front during the last half of 1916 and during 1917 amounted to 20 per cent, only local attacks could be undertaken and their effect proved wholly insufficient against the German defense. Allied resources in man power at home were low and there was little prospect of materially increasing their armed strength, even in the face of the probability of having practically the whole military strength of the Central Powers against them in the spring of 1918.

8. This was the state of affairs that existed when we entered the war. While our action gave the Allies much encouragement yet this was temporary, and a review of conditions made it apparent that America must make a supreme material effort as soon as possible. After duly considering the tonnage possibilities I cabled the following to Washington on July 6, 1917:

Plans should contemplate sending over at least 1,000,000 men by next May.

ORGANIZATION PROJECTS.

9. A general organization project, covering as far as possible the personnel of all combat, staff, and administrative units, was forwarded to Washington on July 11. This was prepared by the Operations Section of my staff and adopted in joint conference with the War Department Committee then in France. It embodied my conclusions on the military organization and effort required of America after a careful study of French and British experience. In forwarding this project I stated:

It is evident that a force of about 1,000,000 is the smallest unit which in modern war will be a complete, well-balanced, and independent fighting organization. However, it must be equally clear that the adoption of this size force as a basis of study should not be construed as representing the maximum force which should be sent to or which will be needed in France. It is taken as the force which may be expected to reach France in time for an offensive in 1918, and as a unit and basis of organization. Plans for the future should be based, especially in reference to the manufacture of artillery, aviation, and other material, on three times this force—i. e., at least 3,000,000 men.

The original project for organized combat units and its state of completion on November 11, 1918, are shown in the charts appended to this report.¹ With a few minor changes, this project remained our guide until the end.

10. While this general organization project provided certain Services of Supply troops, which were an integral part of the

¹ See pls. 9 to 15.

larger combat units, it did not include the great body of troops and services required to maintain an army overseas. To disembark 2,000,000 men, move them to their training areas, shelter them, handle and store the quantities of supplies and equipment they required called for an extraordinary and immediate effort in construction. To provide the organization for this purpose, a project for engineer services of the rear, including railways, was cabled to Washington August 5, 1917, followed on September 18, 1917, by a complete service of the rear project, which listed item by item the troops considered necessary for the Services of Supply. Particular attention is invited to the charts herewith, which show the extent to which this project had developed by November 11, 1918, and the varied units required, many of which did not exist in our Army prior to this war.

11. In order that the War Department might have a clear-cut program to follow in the shipment of personnel and material to insure the gradual building up of a force at all times balanced and symmetrical, a comprehensive statement was prepared covering the order in which the troops and services enumerated in these two projects should arrive. This schedule of priority of shipments, forwarded to the War Department on October 7, divided the initial force called for by the two projects into six phases corresponding to combatant corps of six divisions each.

The importance of the three documents, the general organization project, the service of the rear project, and the schedule of priority of shipments should be emphasized, because they formed the basic plan for providing an army in France together with its material for combat, construction, and supply.

AMERICAN FRONT AND LINE OF COMMUNICATIONS.

12. Before developing plans for a line of communications it was necessary to decide upon the probable sector of the front for the eventual employment of a distinctive American force. Our mission was offensive and it was essential to make plans for striking the enemy where a definite military decision could be gained. While the Allied Armies had endeavored to maintain the offensive, the British, in order to guard the Channel ports, were committed to operations in Flanders and the French to the portion of the front protecting Paris. Both lacked troops to operate elsewhere on a large scale.

To the east the great fortified district east of Verdun and around Metz menaced central France, protected the most exposed portion of the German line of communications, that between Metz and Sedan, and covered the Briey iron region, from which the enemy

obtained the greater part of the iron required for munitions and material. The coal fields east of Metz were also covered by these same defenses. A deep advance east of Metz, or the capture of the Briey region, by threatening the invasion of rich German territory in the Moselle Valley and the Saar Basin, thus curtailing her supply of coal or iron, would have a decisive effect in forcing a withdrawal of German troops from northern France. The military and economic situation of the enemy, therefore, indicated Lorraine as the field promising the most fruitful results for the employment of our armies.

13. The complexity of trench life had enormously increased the tonnage of supplies required by troops. Not only was it a question of providing food but enormous quantities of munitions and material were needed. Upon the railroads of France fell the burden of meeting the heavy demands of the three and one-half million Allied combatants then engaged.

The British were crowding the Channel ports and the French were exploiting the manufacturing center of Paris, so that the railroads of northern France were already much overtaxed. Even though the Channel ports might be used to a limited extent for shipments through England, the railroads leading eastward would have to cross British and French zones of operation, thus making the introduction of a line of communications based on ports and railways in that region quite impracticable. If the American Army was to have an independent and flexible system it could not use the lines behind the British-Belgium front nor those in rear of the French front covering Paris.

The problem confronting the American Expeditionary Forces was then to superimpose its rail communications on those of France where there would be the least possible disturbance to the arteries of supply of the two great Allied armies already in the field. This would require the utmost use of those lines of the existing French railroad system that could bear an added burden. Double-track railroad lines from the ports of the Loire and the Gironde Rivers unite at Bourges, running thence via Nevers, Dijon, and Neufchateau, with lines radiating therefrom toward the right wing of the Allied front. It was estimated that these with the collateral lines available, after considerable improvement, could handle an additional 50,000 tons per day, required for an army of 2,000,000 men. The lines selected, therefore, were those leading from the comparatively unused south-Atlantic ports of France to the northeast where it was believed the American Armies could be employed to the best advantage.¹

14. In the location of our main depots of supply, while it was important that they should be easily accessible, yet they must also be at

¹ See plate 8.

a safe distance, as we were to meet an aggressive enemy capable of taking the offensive in any one of several directions. The area embracing Tours, Orleans, Montargis, Nevers, and Chateauroux was chosen, as it was centrally located with regard to all points on the arc of the western front.

The ports of St. Nazaire, La Pallice, and Bassens were designated for permanent use, while Nantes, Bordeaux, and Pauillac were for emergency use. Several smaller ports, such as St. Malo, Sables-d'Olonne, and Bayonne, were available chiefly for the importation of coal from England. From time to time, certain trans-Atlantic ships were sent to Le Havre and Cherbourg. In anticipation of a large increase in the amount of tonnage that might be required later, arrangements were made during the German offensive of 1918 to utilize the ports of Marseilles and Toulon as well as other smaller ports on the Mediterranean.

For all practical purposes the American Expeditionary Forces were based on the American Continent. Three thousand miles of ocean to cross with the growing submarine menace confronting us, the quantity of ship tonnage that would be available then unknown and a line of communications by land 400 miles long from French ports to our probable front presented difficulties that seemed almost insurmountable as compared with those of our Allies.

15. For purposes of local administration our line of communications in France was subdivided into districts or sections. The territory corresponding to and immediately surrounding the principal ports were, respectively, called base sections, with an intermediate section embracing the region of the great storage depots and an advance section extending to the zone of operations, within which the billeting and training areas for our earlier divisions were located.

16. In providing for the storage and distribution of reserve supplies an allowance of 45 days in the base sections was planned, with 30 days in the intermediate section and 15 days in the advance section. After the safety of our sea transport was practically assured, this was reduced to a total of 45 days, distributed proportionately. When the Armistice was signed all projects for construction had been completed and supplies were on hand to meet the needs of 2,000,000 men, while further plans for necessary construction and for the supply of an additional 2,000,000 were well under way.

GENERAL STAFF.

17. The organization of the General Staff and supply services was one of the first matters to engage my attention. Our situation in this regard was wholly unlike that of our Allies. The French Army was at home and in close touch with its civil government and

war department agencies. While the British were organized on an overseas basis, they were within easy reach of their base of supplies in England. Their problems of supply and replacement were simple as compared with ours. Their training could be carried out at home with the experience of the front at hand, while our troops must be sent as ships were provided and their training resumed in France where discontinued in the States. Our available tonnage was inadequate to meet all the initial demands, so that priority of material for combat and construction, as well as for supplies that could not be purchased in Europe, must be established by those whose perspective included all the services and who were familiar with general plans. For the proper direction and coordination of the details of administration, intelligence, operations, supply, and training, a General Staff was an indispensable part of the Army.

The functions of the General Staff at my headquarters were finally allotted to the five sections, each under an Assistant Chief of Staff, as follows: To the First, or Administrative Section—ocean tonnage, priority of overseas shipments, replacement of men and animals, organization and types of equipment for troops, billeting, prisoners of war, military police, leaves and leave areas, welfare work and amusements; to the Second, or Intelligence Section—information regarding the enemy, including espionage and counterespionage, maps, and censorship; to the Third, or Operations Section—strategic studies and plans and employment of combat troops; to the Fourth Section—coordination of supply services, including Construction, Transportation, and Medical Departments, and control of regulating stations for supply; to the Fifth, or Training Section—tactical training, schools, preparation of tactical manuals, and athletics. This same system was applied in the lower echelons of the command down to include divisions, except that in corps and divisions the Fourth Section was merged with the First and the Fifth Section with the Third.

18. As the American Expeditionary Forces grew, it was considered advisable that, in matters of procurement, transportation, and supply, the chiefs of the several supply services, who had hitherto been under the General Staff at my headquarters, should be placed directly under the supervision of the commanding general, Services of Supply. At General Headquarters, a Deputy Chief of Staff to assist the Chief of Staff was provided, and the heads of the five General Staff sections became Assistant Chiefs of Staff.

The General Staff at my headquarters thereafter concerned itself with the broader phase of control. Under my general supervision and pursuant to clearly determined policies, the Assistant Chiefs of Staff, coordinated by the Chief of Staff, issued instructions and

gave general direction to the great combat units and to the Services of Supply, keeping always in close touch with the manner and promptness of their fulfillment. Thus a system of direct responsibility was put into operation which contemplated secrecy in preparation, prompt decision in emergency, and coordinate action in execution.

19. With the growth of our forces the demand for staff officers rapidly increased, but the available number of officers trained for staff duty was very limited. To meet this deficiency, a General Staff college was organized at Langres on November 28, 1917, for the instruction of such officers as could be spared. An intensive course of study of three months was prescribed embracing the details of our staff organization and administration, and our system of supply, and teaching the combined employment of all arms and services in combat. Officers were carefully chosen for their suitability and, considering the short time available, graduates from this school returned well equipped for staff duties and with a loyal spirit of common service much accentuated. The Staff College carried to completion four courses of three months each, graduating 537 staff officers.

TRAINING.

20. Soon after our arrival in Europe careful study was made of the methods followed by our Allies in training combat troops. Both the French and British maintained continuously a great system of schools and training centers, which provided for both theoretical and practical instruction of inexperienced officers and noncommissioned officers. These centers were required not only to train new troops, but to prepare officers and soldiers for advancement by giving them a short course in the duties of their new grades. These school systems made it possible to spread rapidly a knowledge of the latest methods developed by experience and at the same time counteract false notions.

21. A similar scheme was adopted in August, 1917, for our Armies in which the importance of teaching throughout our forces a sound fighting doctrine of our own was emphasized. It provided for troop training in all units up to include divisions. Corps centers of instruction for noncommissioned officers and unit commanders of all arms were established. These centers also provided special training for the instructors needed at corps schools. Base training centers for replacement troops and special classes of soldiers, such as cooks and mechanics, were designated. The army and corps schools were retained under the direct supervision of the Training Section, General Staff. The schools mentioned graduated 21,330 noncommissioned officers and 13,916 officers.

Particular care was taken to search the ranks for the most promising soldiers, in order to develop leaders for the command of platoons and companies. There were graduated from these candidate schools in France 10,976 soldiers. It was planned to have 22,000 infantrymen under instruction by January 1, 1919, graduating 5,000 to 6,000 each month. In addition, there were to be graduated monthly 800 artillerymen, 400 engineers, and 200 signalmen, making a total of about 7,000 soldiers each month. Prior to November 14, 1918, 12,732 soldiers were commissioned as officers.

It must not be thought that such a system is ideal, but it represents a compromise between the demand for efficiency and the imperative and immediate necessity for trained replacement officers.

22. Every advantage was taken of the experience of our Allies in training officers. It was early recommended to the War Department that French and British officers be asked for to assist in the instruction of troops in the United States. Pending the organization and development of our own schools, a large number of our officers were sent to centers of instruction of the Allied armies. The training of our earlier divisions was begun in close association with the French divisions, under conditions set forth in the following paragraph on divisional training:

Trench warfare naturally gives prominence to the defensive as opposed to the offensive. To guard against this, the basis of instruction should be essentially the offensive both in spirit and in practice. The defensive is accepted only to prepare for future offensive.

For training our Artillery units, special localities such as Valdahon, Coetquidan, Meucon, and Souge, had to be sought, and the instruction was usually carried on in conjunction with French artillery followed up later, as far as possible, with field practice in cooperation with our own Infantry.

23. The long period of trench warfare had so impressed itself upon the French and British that they had almost entirely dispensed with training for open warfare. It was to avoid this result in our Army and to encourage the offensive spirit that the following was published in October, 1917:

1. * * * (a) The above methods to be employed must remain or become distinctly our own.

(b) All instruction must contemplate the assumption of a vigorous offensive. This purpose will be emphasized in every phase of training until it becomes a settled habit of thought.

(c) The general principles governing combat remain unchanged in their essence. This war has developed special features which involve special phases of training, but the fundamental ideas enunciated in our Drill Regulations, Small Arms Firing Manual, Field Service Regulations, and other service manuals remain the guide for both officers and soldiers and constitute the standard

by which their efficiency is to be measured, except as modified in detail by instructions from these headquarters.

(d) The rifle and the bayonet are the principal weapons of the infantry soldier. He will be trained to a high degree of skill as a marksman, both on the target range and in field firing. An aggressive spirit must be developed until the soldier feels himself, as a bayonet fighter, invincible in battle.

(e) All officers and soldiers should realize that at no time in our history has discipline been so important; therefore, discipline of the highest order must be exacted at all times. The standards for the American Army will be those of West Point. The rigid attention, upright bearing, attention to detail, uncomplaining obedience to instructions required of the cadet will be required of every officer and soldier of our armies in France. * * *

Recommendations were cabled to Washington emphasizing the importance of target practice and musketry training, and recommending that instruction in open warfare be made the mission of troops in the United States, while the training in trench warfare so far as necessary be conducted in France. Succeeding divisions, whether serving temporarily with the British or French, were trained as thus indicated. The assistance of the French units was limited to demonstrations, and, in the beginning, French instructors taught the use of French arms and assisted in the preparation of elementary trench warfare problems.

Assuming that divisions would arrive with their basic training completed in the United States, one month was allotted for the instruction of small units from battalions down, a second month of experience in quiet sectors by battalions, and a third month for field practice in open warfare tactics by division, including artillery. Unfortunately many divisions did not receive the requisite amount of systematic training before leaving the States and complete preparation of such units for battle was thus often seriously delayed.

24. The system of training profoundly influenced the combat efficiency of our troops by its determined insistence upon an offensive doctrine and upon training in warfare of movement. Instruction which had hitherto been haphazard, varying with the ideas and conceptions of inexperienced commanding officers and indifferent instructors, was brought under a system based on correct principles. Approved and systematic methods were maintained and enforced largely by the continual presence of members of the Training Section with the troops both during the training period and in campaign.

INTELLIGENCE.

25. Before our entry into the war, European experience had shown that military operations can be carried out successfully and without unnecessary loss only in the light of complete and reliable information of the enemy. Warfare with battle lines separated by short distances only, made possible the early acquirement of information,

such as that obtained through airplane photography, observation from balloons and planes, sensitive instruments for detecting gun positions and raids to secure prisoners and documents. All such information, together with that from Allied sources, including military, political, and economical, was collected, classified, and rapidly distributed where needed.

26. From careful studies of the systems and actual participation by our officers in methods in use at various Allied headquarters, an Intelligence Service was evolved in our forces which operated successfully from its first organization in August, 1917.

With us the simpler methods, such as observation from the air and ground and the exploitation of prisoners and documents, have proved more effective than the less direct means. Every unit from the battalion up had an intelligence detachment, but only in divisions and larger organizations did the intelligence agencies embrace all available means and sources, including radio interception stations and sound and flash-ranging detachments.

27. The subjects studied by the Intelligence Section embraced the location of the enemy's front line, his order of battle, the history and fighting value of his divisions, his manpower, his combat activities, circulation and movement, his defensive organizations, supply, construction and material, air service, radio service, strategy and tactics, and what he probably knew of our intentions. The political and economic conditions within the enemies' countries were also of extreme importance.

28. To disseminate conclusions, daily publications were necessary, such as a Secret Summary of Intelligence containing information of the broadest scope, which concerned only General Headquarters; and a Summary of Information, distributed down to include the divisions, giving information affecting the western front. A Press Review and a Summary of Air Intelligence were also published.

Maps showing graphically the disposition and movement of enemy troops in our front were the best means for distributing information to our troops. At the base printing plant and at General Headquarters base maps were prepared while mobile printing plants, mounted on trucks, accompanied corps and army headquarters. Combat troops were thus supplied with excellent maps distributed, just before and during an attack, down to include company and platoon commanders. Between July 1 and November 11, 1918, over 5,000,000 maps were used.

29. The secret service, espionage and counterespionage, was organized in close cooperation with the French and British. To prevent indiscretions in the letters of officers and soldiers, as well as in

articles written for the press, the Censorship Division was created. The Base Censor examined individual letters when the writer so desired, censored all mail written in foreign languages, of which there were over 50 used, and frequently checked up letters of entire organizations.

30. The policy of press censorship adopted aimed to accomplish three broad results:

To prevent the enemy from obtaining important information of our forces.

To give to the people of the United States the maximum information consistent with the limitations imposed by the first object.

To cause to be presented to the American people the facts as they were known at the time.

There were with our forces 36 regularly accredited correspondents, while visiting correspondents reached a total of 411.

SUMMER OF 1917 TO SPRING OF 1918.

31. In order to hinder the enemy's conquest of Russia and, if possible, prevent a German attack on Italy, or in the near east, the Allies sought to maintain the offensive on the western front as far as their diminished strength and morale would permit. On June 7, 1917, the British took Messines, while a succession of operations known as the Third Battle of Ypres began on July 31 and terminated with the capture of the Passchendaele Ridge November 6-10. The British attack at Cambrai is of special interest, since it was here that American troops (Eleventh Engineers) first participated in active fighting.

The French successfully attacked on a limited front near Verdun, capturing Mort Homme on August 20 and advancing their lines to La Forge Brook. In another offensive, begun on October 23, they gained considerable ground on Chemin des Dames Ridge. These French attacks were characterized by most careful preparation to insure success in order to improve the morale of their troops.

32. Notwithstanding these Allied attacks on the western front, the immense gains by the German armies in the east, culminating at Riga on September 3, precipitated the collapse of Russia. The following month, the Austrians with German assistance surprised the Italians and broke through the lines at Caporetto, driving the Italian armies back to the Piave River, inflicting a loss of 300,000 men, 600,000 rifles, 3,000 guns, and enormous stores. This serious crisis compelled the withdrawal of 10 French and British divisions from the western front to Italy. The German situation on all other theaters was so favorable that as early as November they began the movement of divisions toward the western front. If needed, her

divisions could be withdrawn from the Italian front before the French and British dared recall their divisions.

33. At first the Allies could hardly hope for a large American Army. Marshal Joffre during his visit to America had made special request that a combat division be sent at once to Europe as visual evidence of our purpose to participate actively in the war, and also asked for Engineer regiments and other special service units.

The arrival of the First Division and the parade of certain of its elements in Paris on July 4 caused great enthusiasm and for the time being French morale was stimulated. Still Allied apprehension was deep-seated and material assistance was imperative. The following extract is quoted from the cabled summary of an Allied conference held on July 26 with the French and Italian Commanders-in-Chief and the British and French Chiefs of Staff:

General conclusions reached were necessity for adoption of purely defensive attitude on all secondary fronts and withdrawing surplus troops for duty on western front. By thus strengthening western front believed Allies could hold until American forces arrive in numbers sufficient to gain ascendancy.

The conference urged the immediate study of the tonnage situation with a view to accelerating the arrival of American troops. With the approach of winter, depression among the Allies over the Russian collapse and the Italian crisis was intensified by the conviction that the Germans would undertake a decisive offensive in the spring.

A review of the situation showed that with Russia out of the war the Central Powers would be able to release a large number of divisions for service elsewhere, and that during the spring and summer of 1918, without interfering with the status quo at Salonika, they could concentrate on the western front a force much stronger than that of the Allies. In view of this, it was represented to the War Department in December as of the utmost importance that the Allied preparations be expedited.

34. On December 31, 1917, there were 176,665 American troops in France and but one division had appeared on the front. Disappointment at the delay of the American effort soon began to develop. French and British authorities suggested the more rapid entry of our troops into the line and urged the amalgamation of our troops with their own, even insisting upon the curtailment of training to conform to the strict minimum of trench requirements they considered necessary.

My conclusion was that, although the morale of the German people and of the armies was better than it had been for two years, only an untoward combination of circumstances could give the enemy a decisive victory before American support as recommended could be made effective, provided the Allies secured unity of action. How-

ever, a situation might arise which would necessitate the temporary use of all American troops in the units of our Allies for the defensive, but nothing in the situation justified the relinquishment of our firm purpose to form our own Army under our own flag.

While the Germans were practicing for open warfare and concentrating their most aggressive personnel in shock divisions, the training of the Allies was still limited to trench warfare. As our troops were being trained for open warfare, there was every reason why we could not allow them to be scattered among our Allies, even by divisions, much less as replacements, except by pressure of sheer necessity. Any sort of permanent amalgamation would irrevocably commit America's fortunes to the hands of the Allies. Moreover it was obvious that the lack of homogeneity would render these mixed divisions difficult to maneuver and almost certain to break up under stress of defeat, with the consequent mutual recrimination. Again, there was no doubt that the realization by the German people that independent American divisions, corps, or armies were in the field with determined purpose would be a severe blow to German morale and prestige.

It was also certain that an early appearance of the larger American units on the front would be most beneficial to the morale of the Allies themselves. Accordingly, the First Division, on January 19, 1918, took over a sector north of Toul; the Twenty-sixth Division went to the Soissons front early in February; the Forty-second Division entered the line near Luneville, February 21, and the Second Division near Verdun, March 18. Meanwhile, the First Army Corps Headquarters, Maj. Gen. Hunter Liggett, commanding, was organized at Neufchateau on January 20, and the plan to create an independent American sector on the Lorraine front was taking shape.

This was the situation when the great German offensive was launched on March 21, 1918.

PART II.

OPERATIONS.

EXPEDITING SHIPMENT OF TROOPS.

THE GERMAN OFFENSIVES OF 1918 AND RELATED ALLIED AGREEMENTS.
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PART II.

OPERATIONS.

EXPEDITING SHIPMENT OF TROOPS.

1. The War Department planned as early as July, 1917, to send to France by June 15, 1918, 21 divisions of the then strength of 20,000 men each, together with auxiliary and replacement troops, and those needed for the line of communications, amounting to over 200,000, making a total of some 650,000 men. Beginning with October, 6 divisions were to be sent during that quarter, 7 during the first quarter of 1918, and 8 the second quarter. While these numbers fell short of my recommendation of July 6, 1917, which contemplated at least 1,000,000 men by May, 1918, it should be borne in mind that the main factor in the problem was the amount of shipping to become available for military purposes, in which must be included tonnage required to supply the Allies with steel, coal, and food.

2. On December 2, 1917, an estimate of the situation was cabled to the War Department with the following recommendation:

Paragraph 3. In view of these conditions, it is of the utmost importance to the Allied cause that we move swiftly. The minimum number of troops we should plan to have in France by the end of June is 4 Army corps of 24 divisions in addition to troops for service of the rear. Have impressed the present urgency upon Gen. Bliss and other American members of the conference. Gens. Robertson, Foch, and Bliss agree with me that this is the minimum that should be aimed at. This figure is given as the lowest we should think of and is placed no higher because the limit of available transportation would not seem to warrant it.

Paragraph 4. A study of transportation facilities shows sufficient American tonnage to bring over this number of troops, but to do so there must be a reduction in the tonnage allotted to other than Army needs. It is estimated that the shipping needed will have to be rapidly increased up to 2,000,000 tons by May, in addition to the amount already allotted. The use of shipping for commercial purposes must be curtailed as much as possible. The Allies are very weak and we must come to their relief this year, 1918. The year after may be too late. It is very doubtful if they can hold on until 1919 unless we give them a lot of support this year. It is therefore strongly recommended that a complete readjustment of transportation be made and that the needs of the War Department as set forth above be regarded as immediate. Further details of these requirements will be sent later.

and again on December 20, 1917:

Understood here that a shipping program based on tonnage in sight prepared in War College Division in September contemplated that entire First Corps with its corps troops and some 32,000 auxiliaries were to have been shipped by end of November, and that an additional program for December, January, and February contemplates that the shipment of the Second Corps with its corps troops and other auxiliaries should be practically completed by the end of February. Should such a program be carried out as per schedule and should shipments continue at corresponding rate, it would not succeed in placing even three complete corps, with proper proportion of Army troops and auxiliaries, in France by the end of May. The actual facts are that shipments are not even keeping up to that schedule. It is now the middle of December and the First Corps is still incomplete by over two entire divisions* and many corps troops. It can not be too emphatically declared that we should be prepared to take the field with at least four corps by June 30. In view of past performances with tonnage heretofore available such a project is impossible of fulfillment, but only by most strenuous attempts to attain such a result will we be in a position to take a proper part in operations in 1918. In view of fact that as the number of our troops here increases a correspondingly greater amount of tonnage must be provided for their supply, and also in view of the slow rate of shipment with tonnage now available, it is of the most urgent importance that more tonnage should be obtained at once as already recommended in my cables and by Gen. Bliss.

3. During January, 1918, discussions were held with the British authorities that resulted in an agreement, which became known as the six-division plan and which provided for the transportation of six entire divisions in British tonnage, without interference with our own shipping program. High commanders, staff, Infantry, and auxiliary troops were to be given experience with British divisions, beginning with battalions, the Artillery to be trained under American direction, using French matériel. It was agreed that when sufficiently trained these battalions were to be re-formed into regiments and that when the Artillery was fully trained all of the units comprising each division were to be united for service under their own officers. It was planned that the period of training with the British should cover about 10 weeks. To supervise the administration and training of these divisions the Second Corps staff was organized February 20, 1918.

In the latter part of January joint note No. 12, presented by the Military Representatives with the Supreme War Council, was approved by the Council. This note concluded that France would be safe during 1918 only under certain conditions, namely:

(a) That the strength of the British and French troops in France are continuously kept up to their present total strength and that they receive the expected reinforcements of not less than two American divisions per month.

* The First, Forty-second, Second, and Twenty-sixth Divisions had arrived; but not the Replacement and the Depot Divisions.

THE GERMAN OFFENSIVES OF 1918 AND RELATED ALLIED AGREEMENTS.

4. The first German offensive of 1918, beginning March 21, overran all resistance during the initial period of the attack. Within eight days the enemy had completely crossed the old Somme battlefield and had swept everything before him to a depth of some 56 kilometers. For a few days the loss of the railroad center of Amiens appeared imminent. The offensive made such inroads upon French and British reserves that defeat stared them in the face unless the new American troops should prove more immediately available than even the most optimistic had dared to hope. On March 27 the Military Representatives with the Supreme War Council prepared their joint note No. 18. This note repeated the previously quoted statement from joint note No. 12, and continued:

The battle which is developing at the present moment in France, and which can extend to the other theaters of operations, may very quickly place the Allied Armies in a serious situation from the point of view of effectives, and the Military Representatives are from this moment of opinion that the above-detailed condition (see (a) par. 3) can no longer be maintained, and they consider as a general proposition that the new situation requires new decisions.

The Military Representatives are of opinion that it is highly desirable that the American Government should assist the Allied Armies as soon as possible by permitting in principle the temporary service of American units in Allied Army corps and divisions. Such reinforcements must, however, be obtained from other units than those American divisions which are now operating with the French, and the units so temporarily employed must eventually be returned to the American Army.

The Military Representatives are of the opinion that from the present time, in execution of the foregoing, and until otherwise directed by the Supreme War Council, only American infantry and machine-gun units, organized as that Government may decide, be brought to France, and that all agreements or conventions hitherto made in conflict with this decision be modified accordingly.

The Secretary of War, who was in France at this time, Gen. Bliss, the American Military Representative with the Supreme War Council, and I at once conferred on the terms of this note, with the result that the Secretary recommended to the President that joint note No. 18 be approved in the following sense:

The purpose of the American Government is to render the fullest cooperation and aid, and therefore the recommendation of the Military Representatives with regard to the preferential transportation of American infantry and machine-gun units in the present emergency is approved. Such units, when transported, will be under the direction of the Commander-in-Chief of the American Expeditionary Forces, and will be assigned for training and use by him in his discretion. He will use these and all other military forces of the United States under his command in such manner as to render the greatest military assistance, keeping in mind always the determination of this Government to have its various military forces collected, as speedily as their training and the military

situation permits, into an independent American Army, acting in concert with the armies of Great Britain and France, and all arrangements made by him for their temporary training and service will be made with that end in view.

While note No. 18 was general in its terms, the priority of shipments of infantry more especially pertained to those divisions that were to be trained in the British area, as that Government was to provide the additional shipping according to the six-division plan agreed upon even before the beginning of the March 21 offensive.

On April 2 the War Department cabled that preferential transportation would be given to American infantry and machine-gun units during the existing emergency. Preliminary arrangements were made for training and early employment with the French of such infantry units as might be sent over by our own transportation. As for the British agreement, the six-division plan was to be modified to give priority to the infantry of those divisions. However, all the Allies were now urging the indefinite continuation of priority for the shipment of infantry and its complete incorporation in their units, which fact was cabled to the War Department on April 3, with the specific recommendation that the total immediate priority of infantry be limited to four divisions, plus 45,500 replacements, and that the necessity for future priority be determined later.

5. The Secretary of War and I held a conference with British authorities on April 7, during which it developed that the British had erroneously assumed that the preferential shipment of infantry was to be continuous. It was agreed at this meeting that 60,000 infantry and machine-gun troops, with certain auxiliary units to be brought over by British tonnage during April, should go to the British area as part of the six-division plan, but that there should be a further agreement as to subsequent troops to be brought over by the British. Consequently, a readjustment of the priority schedule was undertaken on the basis of postponing "shipment of all noncombatant troops to the utmost possible to meet present situation, and at the same time not make it impossible to build up our own Army."

6. The battle line in the vicinity of Amiens had hardly stabilized when, on April 9, the Germans made another successful attack against the British lines on a front of some 40 kilometers in the vicinity of Armentieres and along the Lys River. As a result of its being included in a salient formed by the German advance, Passchendaele Ridge, the capture of which had cost so dearly in 1917, was evacuated by the British on April 17.

The losses had been heavy and the British were unable to replace them entirely. They were, therefore, making extraordinary efforts to increase the shipping available for our troops. On April 21, I went to London to clear up certain questions concerning the rate of

shipment and to reach the further agreement provided for in the April 7 conference. The result of this London agreement was cabled to Washington April 24, as follows:

(a) That only the infantry, machine guns, engineers, and signal troops of American divisions and the headquarters of divisions and brigades be sent over in British and American shipping during May for training and service with the British army in France up to six divisions and that any shipping in excess of that required for these troops be utilized to transport troops necessary to make these divisions complete. The training and service of these troops will be carried out in accordance with plans already agreed upon between Sir Douglas Haig and Gen. Pershing, with a view at an early date of building up American divisions.

(b) That the American personnel of the artillery of these divisions and such corps troops as may be required to build up American corps organizations follow immediately thereafter, and that American artillery personnel be trained with French matériel and join its proper divisions as soon as thoroughly trained.

(c) If, when the program outlined in paragraphs (a) and (b) is completed, the military situation makes advisable the further shipment of infantry, etc., of American divisions, then all the British and American shipping available for transport of troops shall be used for that purpose under such arrangement as will insure immediate aid to the Allies, and at the same time provide at the earliest moment for bringing over American artillery and other necessary units to complete the organization of American divisions and corps. Provided that the combatant troops mentioned in (a) and (b) be followed by such Service of the Rear and other troops as may be considered necessary by the American Commander-in-Chief.

(d) That it is contemplated American divisions and corps when trained and organized shall be utilized under the American Commander-in-Chief in an American group.

(e) That the American Commander-in-Chief shall allot American troops to the French or British for training or train them with American units at his discretion, with the understanding that troops already transported by British shipping or included in the six divisions mentioned in paragraph (a) are to be trained with the British Army, details as to rations, equipment, and transport to be determined by special agreement.

7. At a meeting of the Supreme War Council held at Abbeville May 1 and 2, the entire question of the amalgamation of Americans with the French and British was reopened. An urgent appeal came from both French and Italian representatives for American replacements or units to serve with their armies. After prolonged discussion regarding this question and that of priority generally the following agreement was reached, committing the Council to an independent American Army and providing for the immediate shipment of certain troops:

It is the opinion of the Supreme War Council that, in order to carry the war to a successful conclusion, an American Army should be formed as early as possible under its own commander and under its own flag. In order to meet the present emergency it is agreed that American troops should be brought to France as rapidly as Allied transportation facilities will permit, and that, as far as consistent with the necessity of building up an American Army, prefer-

ence will be given to infantry and machine-gun units for training and service with French and British Armies; with the understanding that such infantry and machine-gun units are to be withdrawn and united with its own artillery and auxiliary troops into divisions and corps at the direction of the American Commander-in-Chief after consultation with the Commander-in-Chief of the Allied Armies in France.

Subparagraph A. It is also agreed that during the month of May preference should be given to the transportation of infantry and machine-gun units of six divisions, and that any excess tonnage shall be devoted to bringing over such other troops as may be determined by the American Commander-in-Chief.

Subparagraph B. It is further agreed that this program shall be continued during the month of June upon condition that the British Government shall furnish transportation for a minimum of 130,000 men in May and 150,000 men in June with the understanding that the first six divisions of infantry shall go to the British for training and service, and that troops sent over in June shall be allocated for training and service as the American Commander-in-Chief may determine.

Subparagraph C. It is also further agreed that if the British Government shall transport an excess of 150,000 men in June that such excess shall be infantry and machine-gun units, and that early in June there shall be a new review of the situation to determine further action.

The gravity of the situation had brought the Allies to a full realization of the necessity of providing all possible tonnage for the transportation of American troops. Although their views were accepted to the extent of giving a considerable priority to infantry and machine gunners, the priority agreed upon as to this class of troops was not as extensive as some of them deemed necessary, and the Abbeville conference was adjourned with the understanding that the question of further priority would be discussed at a conference to be held about the end of May.

8. The next offensive of the enemy was made between the Oise and Berry-au-Bac against the French instead of against the British, as was generally expected, and it came as a complete surprise. The initial Aisne attack, covering a front of 35 kilometers, met with remarkable success, as the German armies advanced no less than 50 kilometers in four days. On reaching the Marne that river was used as a defensive flank and the German advance was directed toward Paris. During the first days of June something akin to a panic seized the city and it was estimated that 1,000,000 people left during the spring of 1918.

The further conference which had been agreed upon at Abbeville was held at Versailles on June 1 and 2. The opinion of our Allies as to the existing situation and the urgency of their insistence upon further priority for infantry and machine gunners are shown by the following message prepared by the Prime Ministers of Great Britain, France, and Italy, and agreed to by Gen. Foch:

The Prime Ministers of France, Italy, and Great Britain, now meeting at Versailles, desire to send the following message to the President of the United States:

"We desire to express our warmest thanks to President Wilson for the remarkable promptness with which American aid, in excess of what at one time seemed practicable, has been rendered to the Allies during the past month to meet a great emergency. The crisis, however, still continues. Gen. Foch has presented to us a statement of the utmost gravity, which points out that the numerical superiority of the enemy in France, where 162 Allied divisions now oppose 200 German divisions, is very heavy, and that, as there is no possibility of the British and French increasing the number of their divisions (on the contrary, they are put to extreme straits to keep them up) there is a great danger of the war being lost unless the numerical inferiority of the Allies can be remedied as rapidly as possible by the advent of American troops. He, therefore, urges with the utmost insistence that the maximum possible number of infantry and machine gunners, in which respect the shortage of men on the side of the Allies is most marked, should continue to be shipped from America in the months of June and July to avert the immediate danger of an Allied defeat in the present campaign owing to the Allied reserves being exhausted before those of the enemy. In addition to this, and looking to the future, he represents that it is impossible to foresee ultimate victory in the war unless America is able to provide such an Army as will enable the Allies ultimately to establish numerical superiority. He places the total American force required for this at no less than 100 divisions, and urges the continuous raising of fresh American levies, which, in his opinion, should not be less than 300,000 a month, with a view to establishing a total American force of 100 divisions at as early a date as this can possibly be done.

"We are satisfied that Gen. Foch, who is conducting the present campaign with consummate ability, and on whose military judgment we continue to place the most absolute reliance, is not overestimating the needs of the case, and we feel confident that the Government of the United States will do everything that can be done, both to meet the needs of the immediate situation and to proceed with the continuous raising of fresh levies, calculated to provide, as soon as possible, the numerical superiority which the Commander-in-Chief of the Allied Armies regards as essential to ultimate victory."

A separate telegram contains the arrangements which Gen. Foch, Gen. Pershing, and Lord Milner have agreed to recommend to the United States Government with regard to the dispatch of American troops for the months of June and July.

(Signed)

CLEMENCEAU,
D. LLOYD GEORGE,
ORLANDO.

Such extensive priority had already been given to the transport of American infantry and machine gunners that the troops of those categories which had received even partial training in the United States were practically exhausted. Moreover, the strain on our Services of Supply made it essential that early relief be afforded by increasing its personnel. At the same time, the corresponding services of our Allies had in certain departments been equally over-taxed and their responsible heads were urgent in their representations that their needs must be relieved by bringing over American specialists. The final agreement was cabled to the War Department on June 5, as follows:

The following agreement has been concluded between Gen. Foch, Lord Milner, and myself with reference to the transportation of American troops in the months of June and July:

"The following recommendations are made on the assumption that at least 250,000 men can be transported in each of the months of June and July by the employment of combined British and American tonnage. We recommend:

"(a) For the month of June: (1) Absolute priority shall be given to the transportation of 170,000 combatant troops (viz, six divisions without artillery, ammunition trains, or supply trains, amounting to 126,000 men and 44,000 replacements for combat troops); (2) 25,400 men for the service of the railways, of which 13,400 have been asked for by the French Minister of Transportation; (3) the balance to be troops of categories to be determined by the Commander-in-Chief, American Expeditionary Forces.

"(b) For the month of July: (1) Absolute priority for the shipment of 140,000 combatant troops of the nature defined above (four divisions minus artillery "et cetera" amounting to 84,000 men, plus 56,000 replacement); (2) the balance of the 250,000 to consist of troops to be designated by the Commander-in-Chief, American Expeditionary Forces.

"(c) It is agreed that if the available tonnage in either month allows of the transportation of a larger number of men than 250,000, the excess tonnage will be employed in the transportation of combat troops as defined above.

"(d) We recognize that the combatant troops to be dispatched in July may have to include troops which have had insufficient training, but we consider the present emergency is such as to justify a temporary and exceptional departure by the United States from sound principles of training, especially as a similar course is being followed by France and Great Britain.

(Signed)

"FOCH.

"MILNER.

"PERSHING."

9. The various proposals during these conferences regarding priority of shipment, often very insistent, raised questions that were not only most difficult but most delicate. On the one hand, there was a critical situation which must be met by immediate action, while, on the other hand, any priority accorded a particular arm necessarily postponed the formation of a distinctive American fighting force and the means to supply it. Such a force was, in my opinion, absolutely necessary to win the war. A few of the Allied representatives became convinced that the American Services of Supply should not be neglected but should be developed in the common interest. The success of our divisions during May and June demonstrated fully that it was not necessary to draft Americans under foreign flags in order to utilize American manhood most effectively.

ALLIED COMMANDER-IN-CHIEF.

10. When, on March 21, 1918, the German Army on the western front began its series of offensives, it was by far the most formidable force the world had ever seen. In fighting men and guns it had a great superiority, but this was of less importance than the advantage in morale, in experience, in training for mobile warfare, and in

unity of command. Ever since the collapse of the Russian armies and the crisis on the Italian front in the fall of 1917, German armies were being assembled and trained for the great campaign which was to end the war before America's effort could be brought to bear. Germany's best troops, her most successful generals, and all the experience gained in three years of war were mobilized for the supreme effort.

The first blow fell on the right of the British Armies, including the junction of the British and French forces. Only the prompt cooperation of the French and British general headquarters stemmed the tide. The reason for this objective was obvious and strikingly illustrated the necessity for having someone with sufficient authority over all the Allied Armies to meet such an emergency. The lack of complete cooperation among the Allies on the western front had been appreciated and the question of preparation to meet a crisis had already received attention by the Supreme War Council. A plan had been adopted by which each of the Allies would furnish a certain number of divisions for a general reserve to be under the direction of the military representatives of the Supreme War Council of which Gen. Foch was then the senior member. But when the time came to meet the German offensive in March these reserves were not found available and the plan failed.

This situation resulted in a conference for the immediate consideration of the question of having an Allied Commander-in-Chief. After much discussion during which my view favoring such action was clearly stated, an agreement was reached and Gen. Foch was selected. His appointment as such was made April 3 and was approved for the United States by the President on April 16. The terms of the agreement under which Gen. Foch exercised his authority were as follows:

BEAUVAIS, *April 3, 1918.*

Gen. Foch is charged by the British, French, and American Governments with the coordination of the action of the Allied Armies on the western front; to this end there is conferred on him all the powers necessary for its effective realization. To the same end, the British, French, and American Governments confide in Gen. Foch the strategic direction of military operations.

The Commander-in-Chief of the British, French, and American Armies will exercise to the fullest extent the tactical direction of their armies. Each Commander-in-Chief will have the right to appeal to his Government, if in his opinion his Army is placed in danger by the instructions received from Gen. Foch.

(Signed)

G. CLEMENCEAU.

PETAIN.

F. FOCH.

LLOYD GEORGE.

D. HAIG, *F. M.*

HENRY WILSON, *General, 3.4.18.*

TASKER H. BLISS, *General and Chief of Staff.*

JOHN J. PERSHING, *General, U. S. A.*

EMPLOYMENT OF AMERICAN DIVISIONS FROM MARCH TO SEPTEMBER, 1918.

11. The grave crisis precipitated by the first German offensive caused me to make a hurried visit to Gen. Foch's headquarters, at Bombon, during which all our combatant forces were placed at his disposal. The acceptance of this offer meant the dispersion of our troops along the Allied front and a consequent delay in building up a distinctive American force in Lorraine, but the serious situation of the Allies demanded this divergence from our plans.

On March 21, approximately 300,000 American troops had reached France. Four combat divisions, equivalent in strength to eight French or British divisions, were available—the First and Second then in line, and the Twenty-sixth and Forty-second just withdrawn from line after one month's trench warfare training. The last two divisions at once began taking over quiet sectors to release divisions for the battle; the Twenty-sixth relieved the First Division, which was sent to northwest of Paris in reserve; the Forty-second relieved two French divisions from quiet sectors. In addition to these troops, one regiment of the Ninety-third Division was with the French in the Argonne, the Forty-first Depot Division was in the Services of Supply, and three divisions (Third, Thirty-second, and Fifth) were arriving.

12. On April 25 the First Division relieved two French divisions on the front near Montdidier and on May 28 captured the important observation stations on the heights of Cantigny with splendid dash. French artillery, aviation, tanks, and flame throwers aided in the attack, but most of this French assistance was withdrawn before the completion of the operation in order to meet the enemy's new offensive launched May 27 toward Chateau-Thierry. The enemy reaction against our troops at Cantigny was extremely violent, and apparently he was determined at all costs to counteract the most excellent effect the American success had produced. For three days his guns of all calibers were concentrated on our new position and counterattack succeeded counterattack. The desperate efforts of the Germans gave the fighting at Cantigny a seeming tactical importance entirely out of proportion to the numbers involved.

13. Of the three divisions arriving in France when the first German offensive began, the Thirty-second, intended for replacements, had been temporarily employed in the Services of Supply to meet a shortage of personnel, but the critical situation caused it to be re-assembled and by May 21 it was entering the line in the Vosges. At this time the Fifth Division, though still incomplete, was also ordered into the line in the same region. The Third Division was

assembling in its training area and the Third Corps staff had just been organized to administer these three divisions. In addition to the eight divisions already mentioned, the Twenty-eighth and Seventy-seventh had arrived in the British area, and the Fourth, Twenty-seventh, Thirtieth, Thirty-third, Thirty-fifth, and Eighty-second were arriving there. Following the agreements as to British shipping, our troops came so rapidly that by the end of May we had a force of 600,000 in France.

The third German offensive on May 27, against the French on the Aisne, soon developed a desperate situation for the Allies. The Second Division, then in reserve northwest of Paris and preparing to relieve the First Division, was hastily diverted to the vicinity of Meaux on May 31, and, early on the morning of June 1, was deployed across the Chateau-Thierry-Paris road near Montreuil-aux-Lions in a gap in the French line, where it stopped the German advance on Paris. At the same time the partially trained Third Division was placed at French disposal to hold the crossings of the Marne, and its motorized machine-gun battalion succeeded in reaching Chateau-Thierry in time to assist in successfully defending that river crossing.

The enemy having been halted, the Second Division commenced a series of vigorous attacks on June 4, which resulted in the capture of Belleau Woods after very severe fighting. The village of Bouresches was taken soon after, and on July 1 Vaux was captured. In these operations the Second Division met with most desperate resistance by Germany's best troops.

14. To meet the March offensive, the French had extended their front from the Oise to Amiens, about 60 kilometers, and during the German drive along the Lys had also sent reinforcements to assist the British. The French lines had been further lengthened about 45 kilometers as a result of the Marne pocket made by the Aisne offensive. This increased frontage and the heavy fighting had reduced French reserves to an extremely low point.

Our Second Corps, under Maj. Gen. George W. Read, had been organized for the command of the 10 divisions with the British, which were held back in training areas or assigned to second-line defenses. After consultation with Field Marshal Haig on June 3, 5 American divisions were relieved from the British area to support the French. The Seventy-seventh and Eighty-second Divisions were moved south to release the Forty-second and Twenty-sixth for employment on a more active portion of the front; the Thirty-fifth Division entered the line in the Vosges, and the Fourth and Twenty-eighth Divisions were moved to the region of Meaux and Chateau-Thierry as reserves.

On June 9 the Germans attacked the Montdidier-Noyon front in an effort to widen the Marne pocket and bring their lines nearer to Paris, but were stubbornly held by the French with comparatively little loss of ground. In view of the unexpected results of the three preceding attacks by the enemy, this successful defense proved beneficial to the Allied morale, particularly as it was believed that the German losses were unusually heavy.

15. On July 15, the date of the last German offensive, the First, Second, Third, and Twenty-sixth Divisions were on the Chateau-Thierry front with the Fourth and Twenty-eighth in support, some small units of the last two divisions gaining front-line experience with our troops or with the French; the Forty-second Division was in support of the French east of Rheims; and four colored regiments were with the French in the Argonne. On the Alsace-Lorraine front we had five divisions in line with the French. Five were with the British Army, three having elements in the line. In our training areas four divisions were assembled and four were in the process of arrival.

The Marne salient was inherently weak and offered an opportunity for a counteroffensive that was obvious. If successful, such an operation would afford immediate relief to the Allied defense, would remove the threat against Paris, and free the Paris-Nancy Railroad. But, more important than all else, it would restore the morale of the Allies and remove the profound depression and fear then existing. Up to this time our units had been put in here and there at critical points as emergency troops to stop the terrific German advance. In every trial, whether on the defensive or offensive, they had proved themselves equal to any troops in Europe. As early as June 23 and again on July 10 at Bombon, I had very strongly urged that our best divisions be concentrated under American command, if possible, for use as a striking force against the Marne salient. Although the prevailing view among the Allies was that American units were suitable only for the defensive, and that at all events they could be used to better advantage under Allied command, the suggestion was accepted in principle, and my estimate of their offensive fighting qualities was soon put to the test.

The enemy had encouraged his soldiers to believe that the July 15 attack would conclude the war with a German peace. Although he made elaborate plans for the operation, he failed to conceal fully his intentions, and the front of attack was suspected at least one week ahead. On the Champagne front the actual hour for the assault was known and the enemy was checked with heavy losses. The Forty-second Division entered the line near Somme Py immediately, and five of its infantry battalions and all its artillery became engaged. Southwest of Rheims and along the Marne to the east of Chateau-

Thierry the Germans were at first somewhat successful, a penetration of 8 kilometers beyond the river being effected against the French immediately to the right of our Third Division. The following quotation from the report of the commanding general Third Division gives the result of the fighting on his front:

Although the rush of the German troops overwhelmed some of the front-line positions, causing the infantry and machine-gun companies to suffer, in some cases a 50 per cent loss, no German soldier crossed the road from Fossoy to Crezancy, except as a prisoner of war, and by noon of the following day (July 16) there were no Germans in the foreground of the Third Division sector except the dead.

On this occasion a single regiment of the Third Division wrote one of the most brilliant pages in our military annals. It prevented the crossing at certain points on its front, while on either flank the Germans who had gained a footing pressed forward. Our men, firing in three directions, met the German attacks with counterattacks at critical points and succeeded in throwing two German divisions into complete confusion, capturing 600 prisoners.

16. The selection by the Germans of the Champagne sector and the eastern and southern faces of the Marne pocket on which to make their offensive was fortunate for the Allies, as it favored the launching of the counterattack already planned. There were now over 1,200,000 American troops in France, which provided a considerable force of reserves. Every American division with any sort of training was made available for use in a counteroffensive.

Gen. Petain's initial plan for the counterattack involved the entire western face of the Marne salient. The First and Second American Divisions, with the First French Moroccan Division between them, were employed as the spearhead of the main attack, driving directly eastward, through the most sensitive portion of the German lines, to the heights south of Soissons. The advance began on July 18, without the usual brief warning of a preliminary bombardment, and these three divisions at a single bound broke through the enemy's infantry defenses and overran his artillery, cutting or interrupting the German communications leading into the salient.¹ A general withdrawal from the Marne was immediately begun by the enemy, who still fought stubbornly to prevent disaster.

The First Division, throughout 4 days of constant fighting, advanced 11 kilometers, capturing Berzy-le-Sec and the heights above Soissons and taking some 3,500 prisoners and 68 field guns from the 7 German divisions employed against it. It was relieved by a British division. The Second Division advanced 8 kilometers in the first 26 hours, and by the end of the second day

¹ See plate No. 1.

was facing Tigny, having captured 3,000 prisoners and 66 field guns. It was relieved the night of the 19th by a French division. The result of this counteroffensive was of decisive importance. Due to the magnificent dash and power displayed on the field of Soissons by our First and Second Divisions the tide of war was definitely turned in favor of the Allies.

Other American divisions participated in the Marne counter-offensive. A little to the south of the Second Division, the Fourth was in line with the French and was engaged until July 22. The First American Corps, Maj. Gen. Hunter Liggett commanding, with the Twenty-sixth Division and a French division, acted as a pivot of the movement toward Soissons, capturing Torcy on the 18th and reaching the Chateau-Thierry-Soissons road on the 21st. At the same time the Third Division crossed the Marne and took the heights of Mont St. Pere and the villages of Charteves and Jaulgonne.

In the First Corps, the Forty-second Division relieved the Twenty-sixth on July 25 and extended its front, on the 26th relieving the French division. From this time until August 2 it fought its way through the Forest de Fere and across the Ourcq, advancing toward the Vesle until relieved by the Fourth Division on August 3. Early in this period elements of the Twenty-eighth Division participated in the advance.

Farther to the east the Third Division forced the enemy back to Roncheres Wood, where it was relieved on July 30 by the Thirty-second Division from the Vosges front. The Thirty-second, after relieving the Third and some elements of the Twenty-eighth on the line of the Ourcq River, advanced abreast of the Forty-second toward the Vesle. On August 3 it passed under control of our Third Corps, Maj. Gen. Robert L. Bullard commanding, which made its first appearance in battle at this time, while the Fourth Division took up the task of the Forty-second Division and advanced with the Thirty-second to the Vesle River, where, on August 6, the operation for the reduction of the Marne salient terminated.

In the hard fighting from July 18 to August 6 the Germans were not only halted in their advance but were driven back from the Marne to the Vesle and committed wholly to the defensive. The force of American arms had been brought to bear in time to enable the last offensive of the enemy to be crushed.

17. The First and Third Corps now held a continuous front of 11 kilometers along the Vesle. On August 12 the Seventy-seventh Division relieved the Fourth Division on the First Corps front, and the following day the Twenty-eighth relieved the Thirty-second Division in the Third Corps, while from August 6 to August 10 the Sixth

Infantry Brigade of the Third Division held a sector on the river line. The transfer of the First Corps to the Woevre was ordered at this time, and the control of its front was turned over to the Third Corps.

On August 18 Gen. Petain began an offensive between Rheims and the Oise. Our Third Corps participated in this operation, crossing the Vesle on September 4 with the Twenty-eighth and Seventy-seventh Divisions and overcoming stubborn opposition on the plateau south of the Aisne, which was reached by the Seventy-seventh on September 6. The Twenty-eighth was withdrawn from the line on September 7. Two days later the Third Corps was transferred to the region of Verdun, the Seventy-seventh Division remaining in line on the Aisne River until September 17.

The Thirty-second division, upon its relief from the battle on the Vesle, joined a French corps north of Soissons and attacked from August 29 to 31, capturing Juvigny after some particularly desperate fighting and reaching the Chauny-Soissons road.

18. On the British front two regiments of the Thirty-third Division participated in an attack on Hamel July 4, and again on August 9 as an incident of the allied offensive against the Amiens salient. One of these regiments took Gressaire Wood and Chipilly Ridge, capturing 700 prisoners and considerable matériel.

ASSEMBLING THE FIRST AMERICAN ARMY.

19. In conference with Gen. Petain at Chantilly on May 19 it had been agreed that the American Army would soon take complete charge of the sector of the Woevre. The Twenty-sixth Division was already in line in the Woevre north of Toul and was to be followed by other American divisions as they became available, with the understanding that the sector was to pass to our control when four divisions were in the line. But demands of the battle then going on farther west required the presence of our troops, and the agreement had no immediate result. Due to the presence of a number of our divisions northeast of Paris, the organization of an American corps sector in the Chateau-Thierry region was taken up with Gen. Petain, and on July 4 the First Corps assumed tactical control of a sector in that region. This was an important step, but it was by no means satisfactory, as only one American division at the moment was operating under the control of the First Corps, while we had at this time eight American divisions in the front line serving in French corps.

20. The counter-offensives against the Marne salient in July, and against the Amiens salient in August had gained such an advantage that it was apparent that the emergency, which justified the dis-

persion of our divisions, had passed. The moment was propitious for assembling our divisions. Scattered as they were along the Allied front¹, their supply had become very difficult. From every point of view the immediate organization of an independent American force was indicated. The formation of the Army in the Chateau-Thierry region and its early transfer to the sector of the Woëvre, which was to extend from Nomeny, east of the Moselle, to north of St. Mihiel, was therefore decided upon by Marshal Foch and myself on August 9, and the details were arranged with Gen. Petain later on the same day.

ST. MIHIEL OPERATION.²

21. At Bombon on July 24 there was a conference of all the Commanders-in-Chief for the purpose of considering Allied operations. Each presented proposals for the employment of the armies under his command and these formed the basis of future cooperation of the Allies. It was emphatically determined that the Allied attitude should be to maintain the offensive. As the first operation of the American Army, the reduction of the salient of St. Mihiel was to be undertaken as soon as the necessary troops and material could be made available. On account of the swampy nature of the country it was especially important that the movement be undertaken and finished before the fall rains should begin, which was usually about the middle of September.

Arrangements were concluded for successive relief of American divisions and the organization of the First American Army under my personal command was announced on August 10, with La Ferté-sous-Jouarre as headquarters. This Army nominally assumed control of a portion of the Vesle front, although at the same time directions were given for its secret concentration in the St. Mihiel sector.

22. The force of American soldiers in France at that moment was sufficient to carry out this offensive, but they were dispersed along the front from Switzerland to the Channel. The three Army Corps headquarters to participate in the St. Mihiel attack were the First, Fourth, and Fifth. The First was on the Vesle, the Fourth at Toul, and the Fifth not yet completely organized. To assemble combat divisions and service troops and undertake a major operation, within the short period available and with staffs so recently organized, was an extremely difficult task. Our deficiencies in Artillery, Aviation, and special troops, caused by the shipment of an undue proportion of Infantry and Machine Guns during the summer, were largely met by the French.

¹ See plate No. 5.

² See plate No. 2.

23. The reduction of the St. Mihiel salient was important, as it would prevent the enemy from interrupting traffic on the Paris-Nancy Railroad by artillery fire and would free the railroad leading north through St. Mihiel to Verdun. It would also provide us with an advantageous base of departure for an attack against the Metz-Sedan Railroad system which was vital to the German armies west of Verdun, and against the Briey Iron Basin which was necessary for the production of German armament and munitions.

The general plan was to make simultaneous attacks against the flanks of the salient. The ultimate objective was tentatively fixed as the general line Marieulles (east of the Moselle)—heights south of Gorze-Mars la Tour-Etain. The operation contemplated the use on the western face of 3 or 4 American divisions, supported by the attack of 6 divisions of the Second French Army on their left, while 7 American divisions would attack on the southern face, and 3 French divisions would press the enemy at the tip of the salient. As the part to be taken by the Second French Army would be closely related to the attack of the First American Army, Gen. Petain placed all the French troops involved under my personal command.

By August 30, the concentration of the scattered divisions, corps, and army troops, of the quantities of supplies and munitions required, and the necessary construction of light railways and roads, were well under way.

24. In accordance with the previous general consideration of operations at Bombon on July 24, an allied offensive extending practically along the entire active front was eventually to be carried out. After the reduction of the St. Mihiel sector the Americans were to cooperate in the concerted effort of the Allied armies. It was the sense of the conference of July 24, that the extent to which the different operations already planned might carry us could not be then foreseen, especially if the results expected were achieved before the season was far advanced. It seemed reasonable at that time to look forward to a combined offensive for the autumn, which would give no respite to the enemy and would increase our advantage for the inauguration of succeeding operations extending into 1919.

On August 30, a further discussion with Marshal Foch was held at my headquarters atigny-en-Barrois. In view of the new successes of the French and British near Amiens and the continued favorable results toward the Chemin des Dames on the French front, it was now believed that the limited allied offensive, which was to prepare for the campaign of 1919, might be carried further before the end of the year. At this meeting it was proposed by Marshal

Foch that the general operations as far as the American Army was concerned should be carried out in detail by:

(a) An attack between the Meuse and the Argonne by the Second French Army, reinforced by from four to six American divisions.

(b) A French-American attack, extending from the Argonne west to the Souain Road, to be executed on the right by an American Army astride the Aisne and on the left by the Fourth French Army.

To carry out these attacks the 10 to 11 American divisions suggested for the St. Mihiel operation and the 4 to 6 for the Second French Army, would leave 8 to 10 divisions for an American Army on the Aisne. It was proposed that the St. Mihiel operation should be initiated on September 10 and the other two on September 15 and 20, respectively.

25. The plan suggested for the American participation in these operations was not acceptable to me because it would require the immediate separation of the recently formed First American Army into several groups, mainly to assist French armies. This was directly contrary to the principle of forming a distinct American Army, for which my contention had been insistent. An enormous amount of preparation had already been made in construction of roads, railroads, regulating stations, and other installations looking to the use and supply of our armies on a particular front. The inherent disinclination of our troops to serve under allied commanders would have grown and American morale would have suffered. My position was stated quite clearly that the strategical employment of the First Army as a unit would be undertaken where desired, but its disruption to carry out these proposals would not be entertained.

A further conference at Marshal Foch's headquarters was held on September 2, at which Gen. Petain was present. After discussion the question of employing the American Army as a unit was conceded. The essentials of the strategical decision previously arrived at provided that the advantageous situation of the Allies should be exploited to the utmost by vigorously continuing the general battle and extending it eastward to the Meuse. All the Allied armies were to be employed in a converging action. The British armies, supported by the left of the French armies, were to pursue the attack in the direction of Cambrai; the center of the French armies, west of Rheims, would continue the actions, already begun, to drive the enemy beyond the Aisne; and the American Army, supported by the right of the French armies, would direct its attack on Sedan and Mezieres.

It should be recorded that although this general offensive was fully outlined at the conference no one present expressed the opinion that the final victory could be won in 1918. In fact, it was believed by the French high command that the Meuse-Argonne attack could not

be pushed much beyond Montfaucon before the arrival of winter would force a cessation of operations.

26. The choice between the two sectors, that east of the Aisne including the Argonne Forest, or the Champagne sector, was left to me. In my opinion, no other Allied troops had the morale or the offensive spirit to overcome successfully the difficulties to be met in the Meuse-Argonne sector and our plans and installations had been prepared for an expansion of operations in that direction. So the Meuse-Argonne front was chosen. The entire sector of 150 kilometers of front, extending from Port-sur-Seille, east of the Moselle, west to include the Argonne Forest, was accordingly placed under my command, including all French divisions then in that zone. The First American Army was to proceed with the St. Mihiel operation, after which the operation between the Meuse and the western edge of the Argonne Forest was to be prepared and launched not later than September 25.

As a result of these decisions, the depth of the St. Mihiel operation was limited to the line Vigneulles - Thiaucourt - Regnieville. The number of divisions to be used was reduced and the time shortened. 18 to 19 divisions were to be in the front line. There were 4 French and 15 American divisions available, 6 of which would be in reserve, while the two flank divisions of the front line were not to advance. Furthermore, 2 Army Corps headquarters, with their corps troops, practically all the Army Artillery and Aviation, and the First, Second, and Fourth Divisions, the first two destined to take a leading part in the St. Mihiel attack, were all due to be withdrawn and started for the Meuse-Argonne by the fourth day of the battle.

27. The salient had been held by the Germans since September, 1914. It covered the most sensitive section of the enemy's position on the Western Front; namely, the Mezieres-Sedan-Metz Railroad and the Briey Iron Basin; it threatened the entire region between Verdun and Nancy, and interrupted the main rail line from Paris to the east. Its primary strength lay in the natural defensive features of the terrain itself. The western face of the salient extended along the rugged, heavily wooded eastern heights of the Meuse; the southern face followed the heights of the Meuse for 8 kilometers to the east and then crossed the plain of the Woevre, including within the German lines the detached heights of Loupmont and Montsec which dominated the plain and afforded the enemy unusual facilities for observation. The enemy had reinforced the positions by every artificial means during a period of four years.

28. On the night of September 11, the troops of the First Army were deployed in position. On the southern face of the salient was the First Corps, Maj. Gen. Liggett, commanding, with the Eighty-

second, Ninetieth, Fifth, and Second Divisions in line, extending from the Moselle westward. On its left was the Fourth Corps, Maj. Gen. Joseph T. Dickman, commanding, with the Eighty-ninth, Forty-second, and First Divisions, the left of this corps being opposite Montsec. These two Army Corps were to deliver the principal attack, the line pivoting on the center division of the First Corps. The First Division on the left of the Fourth Corps was charged with the double mission of covering its own flank while advancing some 20 kilometers due north toward the heart of the salient, where it was to make contact with the troops of the Fifth Corps. On the western face of the salient lay the Fifth Corps, Maj. Gen. George H. Cameron, commanding, with the Twenty-sixth Division, Fifteenth French Colonial Division, and the Fourth Division in line, from Mouilly west to Les Eparges and north to Watronville. Of these three divisions, the Twenty-sixth alone was to make a deep advance directed southeast toward Vigneulles. The French Division was to make a short progression to the edge of the heights in order to cover the left of the Twenty-sixth. The Fourth Division was not to advance. In the center, between our Fourth and Fifth Army Corps, was the Second French Colonial Corps, Maj. Gen. E. J. Blondlat, commanding, covering a front of 40 kilometers with 3 small French divisions. These troops were to follow up the retirement of the enemy from the tip of the salient.

The French independent air force was at my disposal which, together with the British bombing squadrons and our own air forces, gave us the largest assembly of aviation that had ever been engaged in one operation. Our heavy guns were able to reach Metz and to interfere seriously with German rail movements.

At dawn on September 12, after four hours of violent artillery fire of preparation, and accompanied by small tanks, the Infantry of the First and Fourth Corps advanced. The infantry of the Fifth Corps commenced its advance at 8 a. m. The operation was carried out with entire precision. Just after daylight on September 13, elements of the First and Twenty-sixth Divisions made a junction near Hattonchatel and Vigneulles, 18 kilometers northeast of St. Mihiel. The rapidity with which our divisions advanced overwhelmed the enemy, and all objectives were reached by the afternoon of September 13. The enemy had apparently started to withdraw some of his troops from the tip of the salient on the eve of our attack, but had been unable to carry it through. We captured nearly 16,000 prisoners, 443 guns, and large stores of material and supplies. The energy and swiftness with which the operation was carried out enabled us to smother opposition to such an extent that we suffered less than 7,000 casualties during the actual period of the advance.

During the next two days the right of our line west of the Moselle River was advanced beyond the objectives laid down in the original orders. This completed the operation for the time being and the line was stabilized to be held by the smallest practicable force.

29. The material results of the victory achieved were very important. An American Army was an accomplished fact, and the enemy had felt its power. No form of propaganda could overcome the depressing effect on the morale of the enemy of this demonstration of our ability to organize a large American force and drive it successfully through his defenses. It gave our troops implicit confidence in their superiority and raised their morale to the highest pitch. For the first time wire entanglements ceased to be regarded as impassable barriers and open-warfare training, which had been so urgently insisted upon, proved to be the correct doctrine. Our divisions concluded the attack with such small losses and in such high spirits that without the usual rest they were immediately available for employment in heavy fighting in a new theater of operations. The strength of the First Army in this battle totaled approximately 500,000 men, of whom about 70,000 were French.

MEUSE-ARGONNE OPERATION.¹

30. The definite decision for the Meuse-Argonne phase of the great allied convergent attack was agreed to in my conference with Marshal Foch and Gen. Petain on September 2. It was planned to use all available forces of the First Army, including such divisions and troops as we might be able to withdraw from the St. Mihiel front. The Army was to break through the enemy's successive fortified zones to include the Kriemhilde-Stellung, or Hindenburg Line, on the front Brioules-Romagne sous Montfaucon-Grandpre, and thereafter, by developing pressure toward Mezieres, was to insure the fall of the Hindenburg Line along the Aisne River in front of the Fourth French Army, which was to attack to the west of the Argonne Forest. A penetration of some 12 to 15 kilometers was required to reach the Hindenburg Line on our front, and the enemy's defenses were virtually continuous throughout that depth.

The Meuse-Argonne front had been practically stabilized in September, 1914, and, except for minor fluctuations during the German attacks on Verdun in 1916 and the French counteroffensive in August, 1917, remained unchanged until the American advance in 1918. The net result of the four years' struggle on this ground was a German defensive system of unusual depth and strength and a wide zone of utter devastation, itself a serious obstacle to offensive operations.

¹ See plate No. 4.

31. The strategical importance of this portion of the line was second to none on the western front. All supplies and evacuations of the German armies in northern France were dependent upon two great railway systems—one in the north, passing through Liege, while the other in the south, with lines coming from Luxemburg, Thionville, and Metz, had as its vital section the line Carignan-Sedan-Mezieres. No other important lines were available to the enemy, as the mountainous masses of the Ardennes made the construction of east and west lines through that region impracticable. The Carignan-Sedan-Mezieres line was essential to the Germans for the rapid strategical movement of troops. Should this southern system be cut by the Allies before the enemy could withdraw his forces through the narrow neck between Mezieres and the Dutch frontier, the ruin of his armies in France and Belgium would be complete.

From the Meuse-Argonne front the perpendicular distance to the Carignan-Mezieres railroad was 50 kilometers. This region formed the pivot of German operations in northern France, and the vital necessity of covering the great railroad line into Sedan resulted in the convergence on the Meuse-Argonne front of the successive German defensive positions. The effect of this convergence can be best understood by reference to plate No. 3. It will be seen, for example, that the distance between "no man's land" and the third German withdrawal position in the vicinity of the Meuse River was approximately 18 kilometers; the distance between the corresponding points near the tip of the great salient of the western front was about 65 kilometers, and in the vicinity of Cambrai was over 30 kilometers. The effect of a penetration of 18 kilometers by the American Army would be equivalent to an advance of 65 kilometers farther west; furthermore, such an advance on our front was far more dangerous to the enemy than an advance elsewhere. The vital importance of this portion of his position was fully appreciated by the enemy, who had suffered tremendous losses in 1916 in attempting to improve it by the reduction of Verdun. As a consequence it had been elaborately fortified, and consisted of practically a continuous series of positions 20 kilometers or more in depth.

In addition to the artificial defenses, the enemy was greatly aided by the natural features of the terrain. East of the Meuse the dominating heights not only protected his left but gave him positions from which powerful artillery could deliver an oblique fire on the western bank. Batteries located in the elaborately fortified Argonne forest covered his right flank, and could cross their fire with that of the guns on the east bank of the Meuse. Midway between the Meuse and the forest the heights of Montfaucon offered perfect observation and formed a strong natural position which had been heavily fortified. The east and west ridges abutting on the Meuse and Aire

River valleys afforded the enemy excellent machine-gun positions for the desperate defense which the importance of the position would require him to make. North of Montfaucon densely wooded and rugged heights constituted natural features favorable to defensive fighting.

32. When the First Army became engaged in the simultaneous preparation for two major operations, an interval of 14 days separated the initiation of the two attacks. During this short period the movement of the immense number of troops and the amount of supplies involved in the Meuse-Argonne battle, over the few roads available, and confined entirely to the hours of darkness, was one of the most delicate and difficult problems of the war. The concentration included 15 divisions, of which 7 were involved in the pending St. Mihiel drive, 3 were in sector in the Vosges, 3 in the neighborhood of Soissons, 1 in a training area, and 1 near Bar-le-Duc. Practically all the Artillery, Aviation, and other auxiliaries to be employed in the new operations were committed to the St. Mihiel attack and therefore could not be moved until its success was assured. The concentration of all units not to be used at St. Mihiel was commenced immediately, and on September 13, the second day of St. Mihiel, reserve divisions and Army Artillery units were withdrawn and placed in motion toward the Argonne front.

That part of the American sector from Fresnes-en-Woevre, southeast of Verdun, to the western edge of the Argonne Forest, while nominally under my control, did not actively become a part of my command until September 22, on which date my headquarters were established at Souilly, southwest of Verdun. Of French troops, in addition to the Second French Colonial Corps, composed of 3 divisions, there was also the Seventeenth French Corps of 3 divisions holding the front north and east of Verdun.

33. At the moment of the opening of the Meuse-Argonne battle, the enemy had 10 divisions in line and 10 in reserve on the front between Fresnes-en-Woevre and the Argonne Forest, inclusive. He had undoubtedly expected a continuation of our advance toward Metz. Successful ruses were carried out between the Meuse River and Luneville to deceive him as to our intentions, and French troops were maintained as a screen along our front until the night before the battle, so that the actual attack was a tactical surprise.

34. The operations in the Meuse-Argonne battle really form a continuous whole, but they extended over such a long period of continuous fighting that they will here be considered in three phases, the first from September 26 to October 3, the second from October 4 to 31, and the third from November 1 to 11.

MEUSE-ARGONNE, FIRST PHASE.

35. On the night of September 25, the 9 divisions to lead in the attack were deployed between the Meuse River and the western edge of the Argonne Forest. On the right was the Third Corps, Maj. Gen. Bullard commanding, with the Thirty-third, Eightieth, and Fourth Divisions in line; next came the Fifth Corps, Maj. Gen. Cameron commanding, with the Seventy-Ninth, Thirty-seventh, and Ninety-first Divisions; on the left was the First Corps, Maj. Gen. Liggett commanding, with the Thirty-fifth, Twenty-eighth, and Seventy-seventh Divisions. Each corps had 1 division in reserve and the Army held 3 divisions as a general reserve. About 2,700 guns, 189 small tanks, 142 manned by Americans, and 821 airplanes, 604 manned by Americans, were concentrated to support the attack of the infantry. We thus had a superiority in guns and aviation, and the enemy had no tanks.

The axis of the attack was the line Montfaucon-Romagney-Buzancy, the purpose being to make the deepest penetration in the center, which, with the Fourth French Army advancing west of the Argonne, would force the enemy to evacuate that forest without our having to deliver a heavy attack in that difficult region.

36. Following three hours of violent artillery fire of preparation, the Infantry advanced at 5.30 a. m. on September 26, accompanied by tanks. During the first two days of the attack, before the enemy was able to bring up his reserves, our troops made steady progress through the network of defenses. Montfaucon was held tenaciously by the enemy and was not captured until noon of the second day.

By the evening of the 28th a maximum advance of 11 kilometers had been achieved and we had captured Baulny, Epinonville, Septsarges, and Dannevoux. The right had made a splendid advance into the woods south of Brioules-sur-Meuse, but the extreme left was meeting strong resistance in the Argonne. The attack continued without interruption, meeting six new divisions which the enemy threw into first line before September 29. He developed a powerful machine gun defense supported by heavy artillery fire, and made frequent counter-attacks with fresh troops, particularly on the front of the Twenty-eighth and Thirty-fifth Divisions. These divisions had taken Varennes, Cheppy, Baulny, and Charpentry, and the line was within 2 kilometers of Apremont. We were no longer engaged in a maneuver for the pinching out of a salient, but were necessarily committed, generally speaking, to a direct frontal attack against strong, hostile positions fully manned by a determined enemy.

37. By nightfall of the 29th the First Army line was approximately Bois de la Cote Lemont—Nantillois—Apremont—southwest across the Argonne. Many divisions, especially those in the center

that. were subjected to cross-fire of artillery, had suffered heavily. The severe fighting, the nature of the terrain over which they attacked, and the fog and darkness sorely tried even our best divisions. On the night of the 29th the Thirty-seventh and Seventy-ninth Divisions were relieved by the Thirty-second and Third Divisions, respectively, and on the following night the First Division relieved the Thirty-fifth Division.

38. The critical problem during the first few days of the battle was the restoration of communications over "no man's land." There were but four roads available across this deep zone, and the violent artillery fire of the previous period of the war had virtually destroyed them. The spongy soil and the lack of material increased the difficulty. But the splendid work of our engineers and pioneers soon made possible the movement of the troops, artillery, and supplies most needed. By the afternoon of the 27th all the divisional artillery, except a few batteries of heavy guns, had effected a passage and was supporting the infantry action.

MEUSE-ARGONNE, SECOND PHASE.

39. At 5.30 a. m. on October 4 the general attack was renewed. The enemy divisions on the front from Fresnes-en-Woevre to the Argonne had increased from 10 in first line to 16, and included some of his best divisions. The fighting was desperate, and only small advances were realized, except by the First Division on the right of the First Corps. By evening of October 5 the line was approximately Bois de la Cote Lemont-Bois du Fays-Gesnes-Hill 240-Fleville-Chehery, southwest through the Argonne.

It was especially desirable to drive the enemy from his commanding positions on the heights east of the Meuse, but it was even more important that we should force him to use his troops there and weaken his tenacious hold on positions in our immediate front. The further stabilization of the new St. Mihiel line permitted the withdrawal of certain divisions for the extension of the Meuse-Argonne operation to the east bank of the Meuse River.

40. On the 7th the First Corps, with the Eighty-second Division added, launched a strong attack northwest toward Cornay, to draw attention from the movement east of the Meuse and at the same time outflank the German position in the Argonne. The following day the Seventeenth French Corps, Maj. Gen. Claudel commanding, initiated its attack east of the Meuse against the exact point on which the German armies must pivot in order to withdraw from northern France. The troops encountered elaborate fortifications and stubborn resistance, but by nightfall had realized an advance of 6 kilometers to a line well within the Bois de Consenvoye, and including

the villages of Beaumont and Haumont. Continuous fighting was maintained along our entire battle front, with especial success on the extreme left, where the capture of the greater part of the Argonne Forest was completed. The enemy contested every foot of ground on our front in order to make more rapid retirements farther west and withdraw his forces from northern France before the interruption of his railroad communications through Sedan.

41. We were confronted at this time by an insufficiency of replacements to build up exhausted divisions. Early in October combat units required some 90,000 replacements, and not more than 45,000 would be available before November 1 to fill the existing and prospective vacancies. We still had two divisions with the British and two with the French. A review of the situation, American and Allied, especially as to our own resources in men for the next two months, convinced me that the attack of the First Army and of the Allied Armies further west should be pushed to the limit. But if the First Army was to continue its aggressive tactics our divisions then with the French must be recalled, and replacements must be obtained by breaking up newly arrived divisions.

In discussing the withdrawal of our divisions from the French with Marshal Foch and Gen. Petain, on October 10, the former expressed his appreciation of the fact that the First Army was striking the pivot of the German withdrawal, and also held the view that the Allied attack should continue. Gen. Petain agreed that the American divisions with the French were essential to us if we were to maintain our battle against the German pivot. The French were, however, straining every nerve to keep up their attacks and, before those divisions with the French had been released, it became necessary for us to send the Thirty-seventh and Ninety-first Divisions from the First Army to assist the Sixth French Army in Flanders.

42. At this time the First Army was holding a front of more than 120 kilometers; its strength exceeded 1,000,000 men; it was engaged in the most desperate battle of our history, and the burden of command was too heavy for a single commander and staff. Therefore, on October 12, that portion of our front extending from Port-sur-Seille, east of the Moselle, to Fresnes-en-Woevre, south-east of Verdun, was transferred to the newly constituted Second Army with Lieut. Gen. Robert L. Bullard in command, under whom it began preparations for the extension of operations to the east in the direction of Briey and Metz. On October 16 the command of the First Army was transferred to Lieut. Gen. Hunter Liggett, and my advance headquarters was established at Ligny-en-Barrois, from which the command of the group of American Armies was exercised.

43. Local attacks of the First Army were continued in order particularly to adjust positions preparatory to a renewed general assault. The First and Fifth Divisions were relieved by the Forty-second and Eightieth Divisions, which were now fresh. An attack along the whole front was made on October 14. The resistance encountered was stubborn, but the stronghold on Cote Dame Marie was captured and the Hindenburg Line was broken. Cunel and Romagne-sous-Montfaucon were taken and the line advanced 2 kilometers north of Sommerance. A maximum advance of 17 kilometers had been made since September 26 and the enemy had been forced to throw into the fight a total of 15 reserve divisions.

During the remainder of the month important local operations were carried out, which involved desperate fighting. The First Corps, Maj. Gen. Dickman commanding, advanced through Grandpre; the Fifth Corps, Maj. Gen. Charles P. Summerall commanding, captured the Bois de Bantheville; the Third Corps, Maj. Gen. John L. Hines commanding, completed the occupation of Cunel Heights; and the Seventeenth French Corps drove the enemy from the main ridge south of La Grande Montagne. Particularly heavy fighting occurred east of the Meuse on October 18, and in the further penetration of the Kriemhilde-Stellung on October 23 the Twenty-sixth Division entering the battle at this time relieved the Eighteenth French Division.

44. Summarizing the material results which had been attained by the First Army by the end of October, we had met an increasing number of Germany's best divisions, rising from 20 in line and reserve on September 26, to 31 on October 31; the enemy's elaborately prepared positions, including the Hindenburg line, in our front had been broken; the almost impassable Argonne Forest was in our hands; an advance of 21 kilometers had been effected; 18,600 prisoners, 370 cannon, 1,000 machine guns, and a mass of material captured; and the great railway artery through Carignan to Sedan was now seriously threatened.

The demands of incessant battle which had been maintained day by day for more than a month had compelled our divisions to fight to the limit of their capacity. Combat troops were held in line and pushed to the attack until deemed incapable of further effort because of casualties or exhaustion; artillery once engaged was seldom withdrawn and many batteries fought until practically all the animals were casualties and the guns were towed out of line by motor trucks. The American soldier had shown unrivaled fortitude in this continuous fighting during most inclement weather and under many disadvantages of position. Through experience, the Army had developed into a powerful and smooth-running machine, and there

was a supreme confidence in our ability to carry through the task successfully.

While the high pressure of these dogged attacks was a great strain on our troops, it was calamitous to the enemy. His divisions had been thrown into confusion by our furious assaults, and his morale had been reduced until his will to resist had well-nigh reached the breaking point. Once a German division was engaged in the fight, it became practically impossible to effect its relief. The enemy was forced to meet the constantly recurring crises by breaking up tactical organizations and sending hurried detachments to widely separated portions of the field.

Every member of the American Expeditionary Forces, from the front line to the base ports, was straining every nerve. Magnificent efforts were exerted by the entire Services of Supply to meet the enormous demands made on it. Obstacles which seemed insurmountable were overcome daily in expediting the movements of replacements, ammunition and supplies to the front, and of sick and wounded to the rear. It was this spirit of determination animating every American soldier that made it impossible for the enemy to maintain the struggle until 1919.

MEUSE-ARGONNE, THIRD PHASE.

45. The detailed plans for the operations of the Allied Armies on the western front changed from time to time during the course of this great battle, but the mission of the First American Army to cut the great Carignan-Sedan-Mezieres Railroad remained unchanged. Marshal Foch coordinated the operations along the entire front, continuing persistently and unceasingly the attacks by all Allied Armies; the Belgian Army, with a French Army and two American divisions, advancing eastward; the British Armies and two American divisions, with the First French Army on their right, toward the region north of Givet; the First American Army and Fourth French Army, toward Sedan and Mezieres.

46. On the 21st my instructions were issued to the First Army to prepare thoroughly for a general attack on October 28, that would be decisive if possible. In order that the attack of the First Army and that of the Fourth French Army on its left should be simultaneous, our attack was delayed until November 1. The immediate purpose of the First Army was to take Buzancy and the heights of Barricourt, to turn the forest north of Grandpre, and to establish contact with the Fourth French Army near Boulton-aux-Bois. The Army was directed to carry the heights of Barricourt by nightfall of the first day and then to exploit this success by advancing its left to Boulton-aux-Bois in preparation for the drive toward Sedan. By strenuous

effort all available artillery had been moved well forward to the heights previously occupied by the enemy, from which it could fully cover and support the initial advance of the Infantry.

On this occasion and for the first time the Army prepared for its attack under normal conditions. We held the front of attack and were not under the necessity of taking over a new front, with its manifold installations and services. Our own personnel handled the communications, dumps, telegraph lines, and water service; our divisions were either on the line or close in rear; the French artillery, aviation, and technical troops which had previously made up our deficiencies had been largely replaced by our own organizations; and our army, corps, and divisional staffs were by actual experience second to none.

47. On the morning of November 1, three Army corps were in line between the Meuse River and the Bois de Bourgogne. On the right the Third Corps had the Fifth and Ninetieth Divisions; the Fifth Corps occupied the center of the line, with the Eighty-ninth and Second Divisions, and was to be the wedge of the attack on the first day; and on the left the First Corps deployed the Eightieth, Seventy-seventh, and Seventy-eighth Divisions.

Preceded by two hours of violent artillery preparation, the Infantry advanced, closely followed by "accompanying guns." The Artillery acquitted itself magnificently, the barrages being so well coordinated and so dense that the enemy was overwhelmed and quickly submerged by the rapid onslaught of the Infantry. By nightfall the Fifth Corps, in the center, had realized an advance of almost 9 kilometers, to the Bois de la Folie, and had completed the capture of the heights of Barricourt, while the Third Corps, on the right, had captured Aincreville and Andevanne. Our troops had broken through the enemy's last defense, captured his artillery positions, and had precipitated a retreat of the German forces about to be isolated in the forest north of Grandpre. On the 2d and 3d we advanced rapidly against heavy fighting on the fronts of the right and center corps; to the left the troops of the First Corps hurried forward in pursuit, some by motor trucks, while the Artillery pressed along the country roads close behind. Our heavy artillery was skillfully brought into position to fire upon the Carignan-Sedan Railroad and the junctions at Longuyon and Conflans. By the evening of the 4th, our troops had reached La Neuville, opposite Stenay, and had swept through the great Forêt de Dieulet, reaching the outskirts of Beaumont, while on the left we were 8 kilometers north of Boulton-aux-Bois.

The following day the advance continued toward Sedan with increasing swiftness. The Third Corps, turning eastward, crossed the

Meuse in a brilliant operation by the Fifth Division, driving the enemy from the heights of Dun-sur-Meuse and forcing a general withdrawal from the strong positions he had so long held on the hills north of Verdun.

By the 7th the right of the Third Corps had exploited its river crossing to a distance of 10 kilometers east of the Meuse, completely ejecting the enemy from the wooded heights and driving him out into the swampy plain of the Woivre; the Fifth and First Corps had reached the line of the Meuse River along their respective fronts and the left of the latter corps held the heights dominating Sedan, the strategical goal of the Meuse-Argonne operation, 41 kilometers from our point of departure on November 1. We had cut the enemy's main line of communications. Recognizing that nothing but a cessation of hostilities could save his armies from complete disaster, he appealed for an immediate armistice on November 6.

48. Meanwhile general plans had been prepared for the further employment of American forces in an advance between the Meuse and the Moselle, to be directed toward Longwy by the First Army, while the Second Army was to assume the offensive toward the Briey Iron Basin. Orders directing the preparatory local operations involved in this enterprise were issued on November 5.

Between the 7th and 10th of November the Third Corps continued its advance eastward to Remoiville, while the Seventeenth French Corps, on its right, with the Seventy-ninth, Twenty-sixth, and Eighty-first American Divisions, and 2 French divisions, drove the enemy from his final foothold on the heights east of the Meuse. At 9 p. m. on November 9 appropriate orders were sent to the First and Second Armies in accordance with the following telegram from Marshal Foch to the Commander of each of the Allied armies:

"The enemy, disorganized by our repeated attacks, retreats along the entire front.

It is important to coordinate and expedite our movements.

I appeal to the energy and the initiative of the Commanders-in-Chief and of their armies to make decisive the results obtained."

In consequence of the foregoing instructions, our Second Army pressed the enemy along its entire front. On the night of the 10th-11th and the morning of the 11th the Fifth Corps, in the First Army, forced a crossing of the Meuse east of Beaumont and gained the commanding heights within the reentrant of the river, thus completing our control of the Meuse River line. At 6 a. m. on the 11th notification was received from Marshal Foch's headquarters that the Armistice had been signed and that hostilities would cease at 11 a. m. Preparatory measures had already been taken to insure the prompt transmission to the troops of the announcement of an Armistice. However, the advance east of Beaumont on the morning of the 11th

had been so rapid and communication across the river was so difficult that there was some fighting on isolated portions of that front after 11 a. m.

49. Between September 26 and November 11, 22 American and 4 French divisions, on the front extending from southeast of Verdun to the Argonne Forest, had engaged and decisively beaten 47 different German divisions, representing 25 per cent of the enemy's entire divisional strength on the western front. Of these enemy divisions 20 had been drawn from the French front and 1 from the British front. Of the 22 American divisions 12 had, at different times during this period, been engaged on fronts other than our own. The First Army suffered a loss of about 117,000 in killed and wounded. It captured 26,000 prisoners, 847 cannon, 3,000 machine guns, and large quantities of material.

The dispositions which the enemy made to meet the Meuse-Argonne offensive, both immediately before the opening of the attack and during the battle, demonstrated the importance which he ascribed to this section of the front and the extreme measures he was forced to take in its defense. From the moment the American offensive began until the Armistice, his defense was desperate and the flow of his divisions to our front was continuous. The rate at which German divisions were used up is illustrated by plate 7, which shows an increase of 27 divisions on the American front during the battle.

OPERATIONS OF THE SECOND ARMY.

50. Under the instructions issued by me on November 5, for operations by the Second Army in the direction of the Briey Iron Basin, the advance was undertaken along the entire front of the army and continued during the last three days of hostilities. In the face of the stiff resistance offered by the enemy, and with the limited number of troops at the disposal of the Second Army, the gains realized reflected great credit on the divisions concerned. On November 6 Marshal Foch requested that 6 American divisions be held in readiness to assist in an attack which the French were preparing to launch in the direction of Chateau-Salins. The plan was agreed to, but with the provision that our troops should be employed under the direction of the commanding general Second Army.

This combined attack was to be launched on November 14, and was to consist of 20 French divisions under Gen. Mangin and the 6 American divisions under Gen. Bullard. Of the divisions designated for this operation the Third, Fourth, Twenty-ninth, and Thirty-sixth were in Army reserve and were starting their march eastward on the morning of November 11, while the Twenty-eighth and Thirty-fifth were being withdrawn from line on the Second Army front.

AMERICAN ACTIVITIES ON OTHER FRONTS.

51. During the first phase of the Meuse-Argonne battle, American divisions were participating in important attacks on other portions of the front. The Second Army Corps, Maj. Gen. Read, commanding, with the Twenty-seventh and Thirtieth Divisions on the British front, was assigned the task in cooperation with the Australian Corps, of breaking the Hindenburg line at Le Cateau, where the St. Quentin Canal passes through a tunnel under a ridge. In this attack, carried out on September 29 and October 1, the Thirtieth Division speedily broke through the main line of defense and captured all of its objectives, while the Twenty-seventh progressed until some of its elements reached Gouy. In this and later actions from October 6 to 19, our Second Corps captured over 6,000 prisoners and advanced about 24 kilometers.

52. On October 2-9 our Second and Thirty-sixth Divisions assisted the Fourth French Army in its advance between Rheims and the Argonne. The Second Division completed its advance on this front by the assault of the wooded heights of Mont Blanc, the key point of the German position, which was captured with consummate dash and skill. The division here repulsed violent counterattacks, and then carried our lines into the village of St. Etienne, thus forcing the Germans to fall back before Rheims and yield positions which they had held since September, 1914. On October 10 the Thirty-sixth Division relieved the Second, exploiting the latter's success, and in two days advanced, with the French, a distance of 21 kilometers, the enemy retiring behind the Aisne River.

53. In the middle of October, while we were heavily engaged in the Meuse-Argonne, Marshal Foch requested that 2 American divisions be sent immediately to assist the Sixth French Army in Belgium, where slow progress was being made. The Thirty-seventh and Ninety-first Divisions, the latter being accompanied by the Artillery of the Twenty-eighth Division, were hurriedly dispatched to the Belgian front. On October 30, in continuation of the Flanders offensive, these divisions entered the line and attacked. By November 3 the Thirty-seventh Division had completed its mission by rapidly driving the enemy across the Escaut River and had firmly established itself on the east bank, while the Ninety-first Division, in a spirited advance, captured Spitaals Bosschen, reached the Scheldt, and entered Audenarde.

AMERICAN TROOPS IN ITALY.

54. The Italian Government early made request for American troops, but the critical situation on the western front made it necessary to concentrate our efforts there. When the Secretary of War

was in Italy during April, 1918, he was urged to send American troops to Italy to show America's interest in the Italian situation and to strengthen Italian morale. Similarly a request was made by the Italian Prime Minister at the Abbeville conference. It was finally decided to send one regiment to Italy with the necessary hospital and auxiliary services, and the Three hundred and thirty-second Infantry was selected, reaching the Italian front in July, 1918. These troops participated in action against the Austrians in the fall of 1918 at the crossing of the Piave River and in the final pursuit of the Austrian Army.

AMERICAN TROOPS IN RUSSIA.

55. It was the opinion of the Supreme War Council that Allied troops should be sent to cooperate with the Russians, either at Murmansk or Archangel, against the Bolshevik forces, and the British Government, through its ambassador at Washington, urged American participation in this undertaking. On July 23, 1918, the War Department directed the dispatch of three battalions of Infantry and three companies of Engineers to join the Allied expedition. In compliance with these instructions the Three hundred and thirty-ninth Infantry, the First Battalion, Three hundred and tenth Engineers, Three hundred and thirty-seventh Field Hospital Company, and Three hundred and thirty-seventh Ambulance Company were sent through England, whence they sailed on August 26.

The mission of these troops was limited to guarding the ports and as much of the surrounding country as might develop threatening conditions. The Allied force operated under British command, through whose orders the small American contingent was spread over a front of about 450 miles. From September, 1918, to May, 1919, a series of minor engagements with the Bolshevik forces occurred, in which 82 Americans were killed and 7 died of wounds.

In April, 1919, two companies of American railroad troops were added to our contingent. The withdrawal of the American force commenced in the latter part of May, 1919, and on August 25 there was left only a small detachment of Graves Registration troops.

THE ADVANCE INTO GERMANY.

56. In accordance with the terms of the Armistice, the Allies were to occupy all German territory west of the Rhine, with bridgeheads of 30 kilometer radius at Cologne, Coblenz, and Mayence. The zone assigned the American command was the bridgehead of Coblenz and the district of Treves. This territory was to be occupied by an American Army, with its reserves held between the Moselle-Meuse Rivers and the Luxemburg frontier.

The instructions of Marshal Foch, issued on November 16, contemplated that 2 French infantry divisions and 1 French cavalry division would be added to the American forces that occupied the Coblenz bridgehead, and that 1 American division would be added to the French force occupying the Mayence bridgehead. As this arrangement presented possibilities of misunderstanding due to difference of views regarding the government of occupied territory, it was represented to the Marshal that each nation should be given a well-defined territory of occupation, employing within such territory only the troops of the commander responsible for the particular zone. On December 9 Marshal Foch accepted the principle of preserving the entity of command and troops, but reduced the American bridgehead by adding a portion of the eastern half to the French command at Mayence.

57. Various reasons made it undesirable to employ either the First or Second Army as the Army of Occupation. Plans had been made before the Armistice to organize a Third Army and, on November 14, this army, with Maj. Gen. Joseph T. Dickman as commander, was designated as the Army of Occupation. The Third and Fourth Army Corps staffs and troops, less artillery, the First, Second, Third, Fourth, Thirty-second, and Forty-second Divisions, and the Sixty-sixth Field Artillery Brigade were assigned to the Third Army. This force was later increased by the addition of the Seventh Corps, Maj. Gen. William M. Wright commanding, with the Fifth, Eighty-ninth, and Ninetieth Divisions.

The advance toward German territory began on November 17 at 5 a. m., six days after signing the Armistice. All of the allied forces from the North Sea to the Swiss border moved forward simultaneously in the wake of the retreating German armies. Upon arrival at the frontier, a halt was made until December 1, when the leading elements of all Allied armies crossed the line into Germany. The Third Army Headquarters were established at Coblenz and an Advance General Headquarters located at Treves. Steps were immediately taken to organize the bridgehead for defense, and dispositions were made to meet a possible renewal of hostilities.

The advance to the Rhine required long arduous marches, through cold and inclement weather, with no opportunity for troops to rest, refit, and refresh themselves after their participation in the final battle. The Army of Occupation bore itself splendidly and exhibited a fine state of discipline both during the advance and throughout the period of occupation.

58. The zone of march of our troops into Germany and the line of communications of the Third Army after reaching the Rhine lay through Luxemburg. After the passage of the Third Army, the occupation of Luxemburg, for the purpose of guarding our line of

communications, was intrusted to the Fifth and Thirty-third Divisions of the Second Army. The city of Luxemburg, garrisoned by French troops and designated as the headquarters of the Allied Commander-in-Chief, was excluded from our control.

Upon entering the Duchy of Luxemburg in the advance, a policy of noninterference in the affairs of the Grand Duchy was announced. Therefore, when the French commander in the city of Luxemburg was given charge of all troops in the Duchy, in so far as concerned the "administration of the Grand Duchy of Luxemburg," my instructions were that our troops would not be subject to his control. Later, at my request, and in order to avoid possible friction, Marshal Foch placed the entire Duchy in the American Zone.

RETURN OF TROOPS TO THE UNITED STATES.

59. On the day the Armistice was signed, the problem of the return of our troops to the United States was taken up with the War Department and, on November 15, a policy recommended of sending home certain auxiliaries so that we could begin to utilize all available shipping without delay. On December 21 the War Department announced by cable that it had been decided to begin immediately the return of our forces and continue as rapidly as transportation would permit. To carry this out, a schedule for the constant flow of troops to the ports was established, having in mind our international obligations pending the signing of the treaty of peace.

60. While more intimately related to the functions of the Services of Supply than to Operations, it is logical to introduce here a brief recital of the organizations created for the return of our troops to America. Prior to the Armistice but 15,000 men had been returned home. Although the existing organization was built for the efficient and rapid handling of the incoming forces, the embarkation of this small number presented no difficulties. But the Armistice suddenly and completely reversed the problem of the Services of Supply at the ports and the handling of troops. It became necessary immediately to reorganize the machinery of the ports, to construct large embarkation camps, and to create an extensive service for embarking the homeward-bound troops.

Brest, St. Nazaire, and Bordeaux became the principal embarkation ports, Marseilles and Le Havre being added later to utilize Italian and French liners. The construction of the embarkation camps during unseasonable winter weather was the most trying problem. These, with the billeting facilities available, gave accommodation for 55,000 at Brest, 44,000 at St. Nazaire, and 130,000 at Bordeaux. Unfortunately, the largest ships had to be handled at Brest, where the least shelter was available.

To maintain a suitable reservoir of men for Brest and St. Nazaire, an Embarkation Center was organized around Le Mans, which eventually accommodated 230,000 men. Here the troops and their records were prepared for the return voyage and immediate demobilization. As the troops arrived at the base ports, the embarkation service was charged with feeding, reclothing, and equipping the hundreds of thousands who passed through, which required the maintenance of a form of hotel service on a scale not hitherto attempted.

61. On November 16 all combat troops, except 30 divisions and a minimum of corps and army troops, were released for return to the United States. It was early evident that only limited use would be made of the American divisions, and that the retention of 30 divisions was not necessary. Marshal Foch considered it indispensable to maintain under arms a total, including Italians, of 120 to 140 divisions, and he proposed that we maintain 30 divisions in France until February 1, 25 of which should be held in the Zone of the Armies, and that on March 1 we should have 20 divisions in the Zone of the Armies and 5 ready to embark. The plan for March 1 was satisfactory, but the restrictions as to the divisions that should be in France on February 1 could not be accepted, as it would seriously interfere with the flow of troops homeward.

In a communication dated December 24 the Marshal set forth the minimum forces to be furnished by the several Allies, requesting the American Army to furnish 22 to 25 divisions of Infantry. In the same note he estimated the force to be maintained after the signing of the preliminaries of peace at about 32 divisions, of which the American Army was to furnish 6.

In reply it was pointed out that our problem of repatriation of troops and their demobilization was quite different from that of France or Great Britain. On account of our long line of communications in France and the time consumed by the ocean voyage and travel in the United States, even with the maximum employment of our then available transportation, at least a year must elapse before we could complete our demobilization. Therefore, it was proposed by me that the number of American combat divisions to be maintained in the Zone of the Armies should be reduced on April 1 to 15 divisions and on May 1 to 10 divisions, and that in the unexpected event that the preliminaries of peace should not be signed by May 1 we would continue to maintain 10 divisions in the Zone of the Armies until the date of signature.

The Allied Commander-in-Chief later revised his estimate, and, on January 24, stated to the Supreme War Council that the German demobilization would permit the reduction of the Allied forces to 100 divisions, of which the Americans were requested to furnish 5. In reply, it was again pointed out that our problem was entirely o

of transportation, and that such a promise was unnecessary inasmuch as it would probably be the summer of 1919 before we could reduce our forces below the number asked. We were, therefore, able to keep our available ships filled, and by May 19 all combat divisions, except 5 still in the Army of Occupation, were under orders to proceed to ports of embarkation. This provided sufficient troops to utilize all troop transports to include July 15.

62. The President had informed me that it would be necessary for us to have at least one regiment in occupied Germany, and left the details to be discussed by me with Marshal Foch. My cable of July 1 summarizes the agreement reached:

"By direction of President, I have discussed with Marshal Foch question of forces to be left on the Rhine. Following agreed upon: The Fourth and Fifth Divisions will be sent to base ports immediately, the Second Division will commence moving to base ports on July 15, and the Third Division on August 15. Date of relief of First Division will be decided later. Agreement contemplates that after compliance by Germany with military conditions to be completed within first three months after German ratification of treaty, American force will be reduced to one regiment of Infantry and certain auxiliaries. Request President be informed of agreement."

As a result of a later conference with Marshal Foch, the Third Division was released on August 3 and the First Division on August 15.

PART III.

SUPPLY, COORDINATION, MUNITIONS, AND ADMINISTRATION.

THE SERVICES OF SUPPLY.

COORDINATION OF SUPPLY AT THE FRONT.	TRANSPORTATION CORPS.
PURCHASING AGENCY.	QUARTERMASTER CORPS.
OCEAN TONNAGE.	SIGNAL CORPS.
REPLACEMENTS OF PERSONNEL.	MOTOR TRANSPORT CORPS.
REMOUNTS.	RENTING, REQUISITION, AND CLAIMS
RECLASSIFICATION OF PERSONNEL.	SERVICE.
CONSTRUCTION BY ENGINEER CORPS.	

MUNITIONS.

ORDNANCE.	TANKS.
AVIATION.	CHEMICAL WARFARE.

ADMINISTRATION.

MEDICAL AND SANITARY CONDITIONS.	MILITARY JUSTICE.
RECORDS, PERSONNEL, AND MAIL SERVICE.	PROVOST MARSHAL GENERAL'S DEPART-
INSPECTIONS—DISCIPLINE.	MENT.

PART III.
SUPPLY, COORDINATION, MUNITIONS, AND ADMINIS-
TRATION.

THE SERVICES OF SUPPLY.

1. In February, 1918, the Line of Communications was reorganized under the name of the Services of Supply. At that time all staff services and departments, except The Adjutant General's, the Inspector General's, and the Judge Advocate General's Departments, were grouped for supply purposes under one coordinating head, the Commanding General, Services of Supply, with a General Staff paralleling, so far as necessary, the General Staff at General Headquarters.

The principal functions of the Services of Supply were the procurement, storage, and transportation of supplies. These activities were controlled in a general way by the commanding general Services of Supply, the maximum degree of independence being permitted to the several services. This great organization was charged with immense projects in connection with roads, docks, railroads, and buildings; the transportation of men, animals, and supplies by sea, rail, and inland waterways; the operation of telegraph and telephone systems; the control and transportation of replacements; the hospitalization necessary for an army of 2,000,000 men; the reclassification of numerous officers and men; the establishment of leave areas and of welfare and entertainment projects; the liquidation of our affairs in France; and the final embarkation of our troops for home.

The growth of the permanent port personnel, the location near the base ports of certain units for training, and other considerations led to the appointment of a territorial commander for the section around each port who, while acting as the representative of the commanding general Services of Supply, was given the local authority of a district commander. For similar reasons, an Intermediate Section Commander and an Advance Section Commander were appointed. Eventually there were nine base sections, including one in England, one in Italy, and one comprising Rotterdam and Antwerp, also one intermediate and one advance section.¹

¹ See plate No. 8.

The increasing participation of the American Expeditionary Forces in active operations necessitated the enlargement of the responsibilities and authority of the commanding general Services of Supply. In August, 1918, he was charged with complete responsibility for all supply matters in the Services of Supply, and was authorized to correspond by cable directly with the War Department on all matters of supply not involving questions of policy.

In the following discussion of the Services of Supply the subjects of coordination of supply at the front, ocean tonnage, and replacements are included for convenience, though they were largely or entirely under the direct control of General-Staff Sections at my headquarters.

COORDINATION OF SUPPLY AT THE FRONT.

2. Our successful participation in the war required that all the different services immediately concerned with the supply of combat troops should work together as a well-regulated machine. In other words, there must be no duplication of effort, but each must perform its functions without interference with any other service. The Fourth Section of the General Staff was created to control impartially all these services, and, under broad lines of policy, to determine questions of transportation and supply in France and coordinate our supply services with those of the Allies.

This section did not work out technical details but was charged with having a general knowledge of existing conditions as to supply, its transportation, and of construction affecting our operations or the efficiency of our forces. It frequently happened that several of the supply departments desired the same site for the location of installations, so that all plans for such facilities had to be decided in accordance with the best interests of the whole.

3. In front of the advance depots, railroad lines and shipments to troops had to be carefully controlled, because mobility demanded that combat units should not be burdened with a single day's stores above the authorized standard reserve. Furthermore, accumulations at the front were exposed to the danger of destruction or capture and might indicate our intentions. Each combat division required the equivalent of 25 French railway car loads of supplies for its daily consumption to be delivered at a point within reach of motor or horse-drawn transportation. The regular and prompt receipt of supplies by combatant troops is of first importance in its effect upon the morale of both officers and men. The officer whose mind is pre-occupied by the question of food, clothing, or ammunition, is not free to devote his energy to training his men or to fighting the enemy. It is necessary that paper work be reduced to an absolute

minimum and that the delivery of supplies to organizations be placed on an automatic basis as far as possible.

4. The principle of flexibility had to be borne in mind in planning our supply system in order that our forces should be supplied, no matter what their number, or where they might be called upon to enter the line. This high degree of elasticity and adaptability was assured and maintained through the medium of the regulating station. It was the connecting link between the armies and the services in the rear, and regulated the railroad transportation which tied them together. The regulating officer at each such station was a member of the Fourth Section of my General Staff, acting under instructions from his chief of section.

Upon the regulating officer fell the responsibility that a steady flow of supply was maintained. He must meet emergency shipments of ammunition or engineering material, sudden transfers of troops by rail, the hastening forward of replacements, or the unexpected evacuation of wounded. All the supply services naturally clamored to have their shipments rushed through. The regulating officer, acting under special or secret instructions, must declare priorities in the supply of things the Army needed most. Always informed of the conditions at the front, of the status of supplies, and of military plans and intentions, nothing could be shipped to the regulating station or in front of the advance depots except on his orders. The chiefs of supply services fulfilled their responsibilities when they delivered to the regulating officer the supplies called for by him, and he met his obligation when these supplies were delivered at the proper railheads at the time they were needed. The evacuation of the wounded was effected over the same railroad lines as those carrying supplies to the front, therefore, this control had also to be centralized in the regulating officer.

The convenient location of the regulating stations was of prime importance. They had to be close enough to all points in their zones to permit trains leaving after dusk or during the night to arrive at their destinations by dawn. They must also be far enough to the rear to be reasonably safe from capture. Only two regulating stations were actually constructed by us in France, Is-sur-Tille and Liffol-le-Grand, as the existing French facilities were sufficient to meet our requirements beyond the reach of those stations.

As far as the regulating officer was concerned, supplies were divided into four main classes. The first class constituted food, forage and fuel, needed and consumed every day; the second, uniforms, shoes, blankets and horse shoes, which wear out with reasonable regularity; the third, articles of equipment which require replacement at irregular intervals, such as rolling kitchens, rifles and escort

wagons; the fourth class covered articles, the flow of which depended upon tactical operations, such as ammunition and construction material. Articles in the first class were placed on an automatic basis, but formal requisition was eliminated as far as possible for all classes.

5. In order to meet many of the immediate needs of troops coming out of the line and to relieve to some extent the great strain on the railheads during active fighting, a system of army depots was organized. These depots were supplied by bulk shipments from the advance depots through the regulating stations during relatively quiet periods. They were under the control of the chiefs of the supply services of the armies and required practically no construction work, the supplies being stored in open places protected only by dunnage and camouflaged tarpaulins.

6. The accompanying diagram¹ illustrates graphically the supply system which supported our armies in France. The Services of Supply can be likened to a great reservoir divided into three main parts—the base depots, the intermediate depots and the advance depots. The management of this reservoir is in charge of the commanding general, Services of Supply, who administers it with a free hand, controlled only by general policies outlined to him from time to time. Each of the supply and technical services functions independently in its own respective sphere; each has its share of storage space in the base depots, in the intermediate depots, and in the advance depots. Then comes the distribution system, and here the control passes to the chief of the Fourth Section of the General Staff, who exercises his powers through the regulating stations.

PURCHASING AGENCY.

7. The consideration of requirements in food and material led to the adoption of an automatic supply system, but, with the exception of foodstuffs, there was an actual shortage, especially in the early part of the war, of many things, such as equipment pertaining to land transportation and equipment and material for combat. The lack of ocean tonnage to carry construction material and animals at the beginning was serious. Although an increasing amount of shipping became available as the war progressed, at no time was there sufficient for our requirements. The tonnage from the States reached about seven and one-half million tons to December 31, 1918, which was a little less than one-half of the total amount obtained.

The supply situation made it imperative that we utilize European resources as far as possible for the purchase of material and supplies. If our Services of Supply departments had entered the market of

¹ See plate No. 6.

Europe as purchasers without regulation or coordination, they would have been thrown into competition with each other, as well as with buyers from the Allied armies and the civil populations. Such a system would have created an unnatural elevation of prices, and would have actually obstructed the procurement of supplies. To meet this problem from the standpoint of economical business management, directions were given in August, 1917, for the creation of a General Purchasing Board to coordinate and control our purchases both among our own services and among the Allies as well. The supervision and direction of this agency was placed in the hands of an experienced business man, and every supply department in the American Expeditionary Forces was represented on the board. Agents were stationed in Switzerland, Spain, and Holland, besides the Allied countries. The character of supplies included practically the entire category of necessities, although the bulk of our purchases consisted of raw materials for construction, ordnance, air equipment, and animals. A total of about 10,000,000 tons was purchased abroad by this agency to December 31, 1918, most of which was obtained in France.

The functions of the Purchasing Agency were gradually extended until they included a wide field of activities. In addition to the coordination of purchases, the supply resources of our Allies were reconnoitered and intimate touch was secured with foreign agencies; a Statistical Bureau was created which classified and analyzed our requirements; quarterly forecasts of supplies were issued; civilian manual labor was procured and organized; a Technical Board undertook the coordination, development, and utilization of the electric power facilities in France; a Bureau of Reciprocal Supplies viséed the claims of foreign governments for raw materials from the United States; and a general printing plant was established. Some of these activities were later transferred to other services as the latter became ready to undertake their control.

The principles upon which the usefulness of this agency depended were extended to our Allies, and in the summer of 1918 the General Purchasing Agent became a member of the Interallied Board of Supplies. This Board undertook, with signal success, to coordinate the supply of the Allied armies in all those classes of material necessities that were in common use in all the armies. The possibility of immense savings were fully demonstrated, but the principles had not become of general application before the Armistice.

OCEAN TONNAGE.

8. Following a study of tonnage requirements, an officer was sent to Washington in December, 1917, with a general statement of the shipping situation in France as understood by the Allied Maritime

Council. In March, 1918, tonnage requirements for transport and maintenance of 900,000 men in France by June 30 were adopted as a basis upon which to calculate supply requisitions and the allocation of tonnage.

In April the Allied Maritime Transport Council showed that requirements for 1918 greatly exceeded the available tonnage. Further revisions of the schedule were required by the Abbeville Agreement in May, under which American infantry and machine-gun units were to be transported in British shipping, and by the Versailles Agreement in June.

In July, a serious crisis developed as the allotment for August made the American Expeditionary Forces by the Shipping Control Committee was only 575,000 dead-weight tons, afterwards increased to 700,000, whereas 803,000 tons (not including animals) were actually needed. It was strongly urged by me that more shipping be diverted from trades and that a larger percentage of new shipping be placed in transport service.

9. Early in 1918, a scheme had been proposed which would provide priority for essential supplies only, based upon monthly available tonnage in sight. Although it was the understanding that calls for shipping should be based upon our actual needs, much irregularity was found in tonnage allotments, as shown by the following cables sent September 14, 1918.

"The following variations from cable orders are noticeable:

Q. M. supplies cabled for, for August delivery, 182,287 short tons.

Q. M. supplies actually received during August, 231,850 short tons.

T. D. supplies (rolling stock, etc.) called for, for August delivery, 113,482 short tons.

T. D. supplies actually received during August, 67,521 short tons."

"You must prepare to ship supplies we request, instead of shipping excessive amounts of supplies of which we have a due proportion."

"An increase in the allotment of tonnage must be made, even for September. It is imperative. I can not too strongly urge that the allotment be reconsidered in the light of the above showing of our deficiencies. * * *" "At the present time our ability to supply and maneuver our forces depends largely on motor transportation * * *. We are able to carry out present plans due to fact that we have been able to borrow temporarily large numbers of trucks and ambulances from the French * * *. The shortage of ambulances to move our wounded is critical * * *. We have reached the point where we can no longer improvise or borrow. The most important plans and operations depend upon certainty that the home Government will deliver at French ports material and equipment cabled for. It is urged that foregoing be given most serious consideration and that tonnage allotted for supply of Army in France be sufficient to deliver material and equipment, properly proportioned in kinds and amount, to meet the needs of our troops * * *."

The following is a brief summary of the tonnage asked for and the amount actually received in France during the critical period from July to October, 1918:

Month.	Cabled for by Ameri- can Ex- peditionary Forces.	Received in France from United States.	Shortage.
July.....	1 480,891	438,047	42,844
August.....	700,527	511,261	189,266
September.....	869,438	539,018	330,420
October.....	1,022,135	623,689	398,446
Total.....	3,072,991	2,112,015	960,976

¹ Tons of 2,000 pounds.

REPLACEMENTS OF PERSONNEL.

10. Under the original organization project there were to be two divisions in each corps of six divisions which were to be used as reservoirs of replacements. One half of the Artillery and other auxiliaries of these two divisions were to be utilized as corps and army troops. They were to supply the first demands for replacements from their original strength, after which a minimum of 3,000 men per month for each army corps in France was to be forwarded to them from the United States. It was estimated that this would give a sufficient reservoir of personnel to maintain the fighting strength of combat units, provided the sick and wounded were promptly returned to their own units upon recovery.

The Thirty-second and Forty-first Divisions were the first to be designated as replacement and depot divisions of the First Army Corps, but the situation soon became such that the Thirty-second Division had to be employed as a combat division. For the same reason all succeeding divisions had to be trained for combat, until June 27, when the need for replacements made it necessary to designate the Eighty-third as a depot division.

11. By the middle of August we faced a serious shortage of replacements. Divisions had arrived in France below strength, and each division diverted from replacement to combat duty increased the number of divisions to be supplied and at the same time decreased the supply.

On August 16 the War Department was cabled, as follows:

"Attention is especially invited to the very great shortage in arrivals of replacements heretofore requested. Situation with reference to replacements is now very acute. Until sufficient replacements are available in France to keep our proven divisions at full strength, replacements should by all means be sent in preference to new divisions."

At this time it became necessary to transfer 2,000 men from each of three combat divisions (the Seventh, Thirty-sixth, and Eighty-first) to the First Army, in preparation for the St. Mihiel offensive.

By the time the Meuse-Argonne offensive was initiated the replacement situation had become still more acute. The Infantry and Ma-

chine gun units of the Eighty-fourth and Eighty-sixth Divisions, then in the vicinity of Bordeaux, were utilized as replacements, leaving only a cadre of two officers and twenty-five men for each company. To provide immediate replacements during the progress of the battles new replacement organizations were formed in the Zone of Operations; at first, as battalions, and later, as regional replacement depots. .

12. On October 3, a cable was sent the War Department, reading as follows:

"Over 50,000 of the replacements requested for the months of July, August, and September have not yet arrived. Due to extreme seriousness of the replacement situation, it is necessary to utilize personnel of the Eighty-fourth and Eighty-sixth Divisions for replacement purposes. Combat divisions are short over 80,000 men. Vitally important that all replacements due, including 55,000 requested for October, be shipped early in October. If necessary, some divisions in United States should be stripped of trained men and such men shipped as replacements at once."

Altogether seven divisions had to be skeletonized, leaving only one man per company and one officer per regiment to care for the records. As a further measure to meet the situation, the authorized strength of divisions was reduced in October by 4,000 men, thus lowering the strength of each Infantry company to approximately 174 men. The 30 combat divisions in France at that time needed 103,513 Infantry and machine-gun replacements, and only 66,490 were available.

Attention of the War Department was invited on November 2 to the fact that a total of 140,000 replacements would be due by the end of November, and the cable closed by saying:

"To send over entire divisions, which must be broken up on their arrival in France so we may obtain replacements that have not been sent as called for, is a wasteful method, and one that makes for inefficiency; but as replacements are not otherwise available, there is no other course open to us. New and only partially trained divisions can not take the place of older divisions that have had battle experience. The latter must be kept up numerically to the point of efficiency * * *."

REMOUNTS.

13. The shortage of animals was a serious problem throughout the war. In July, 1917, the French agreed to furnish our forces with 7,000 animals a month, and accordingly the War Department was requested to discontinue shipments. On August 24, however, the French advised us that it would be impossible to furnish the number of animals originally stated, and Washington was again asked to supply animals, but none could be sent over until November, and then only a limited number.

Early in 1918, after personal intervention and much delay, the French Government made requisition on the country, and we were

able to obtain 50,000 animals. After many difficulties, the Purchasing Board was successful in obtaining permission, in the summer of 1918, to export animals from Spain, but practically no animals were received until after the Armistice.

Every effort was made to reduce animal requirements—by increased motorization of artillery and by requiring mounted officers and men to walk—but in spite of all these efforts, the situation as to animals grew steadily worse. The shortage by November exceeded 106,000, or almost one-half of all our needs. To relieve the crisis in this regard, during the Meuse-Argonne battle, Marshal Foch requisitioned 13,000 animals from the French Armies and placed them at my disposal.

RECLASSIFICATION OF PERSONNEL.

14. An important development in the Services of Supply was the reclassification system for officers and men. This involved not only the physical reclassification of those partially fit for duty, but also the reclassification of officers according to fitness for special duties. A number of officers were found unfit for combat duty, and many in noncombatant positions were found unsuited to the duties on which employed. An effort was made to reassign these officers to the advantage of themselves and the Army. A total of 1,101 officers were reclassified in addition to the disabled, and 270 were sent before efficiency boards for elimination. 962 wounded or otherwise disabled officers were reclassified, their services being utilized to release officers on duty with the Services of Supply who were able to serve with combat units.

CONSTRUCTION BY ENGINEER CORPS.

15. Among the most notable achievements of the American Expeditionary Forces was the large program of construction carried out by our Engineer troops in the Services of Supply and elsewhere. The chief projects were port facilities including docks, railroads, warehouses, hospitals, barracks, and stables. These were planned to provide ultimately for an army of 4,000,000 men, the construction being carried on coincident with the growth of the American Expeditionary Forces.

The port plans contemplated 160 new berths, including the necessary facilities for discharge of cargo, approximately one-half of which were completed at the time of the Armistice. Construction of new standard-gauge railroad track amounted to 1,002 miles, consisting mainly of cut-offs, double tracking at congested points, and yards at ports and depots. Road construction and repair continued until our troops were withdrawn from the several areas, employing

at times upward of 10,000 men, and often using 90,000 tons of stone per week.

Storage requirements necessitated large supply depots at the ports and in the intermediate and advance sections. Over 2,000,000 square feet of covered storage was secured from the French, but it was necessary to construct approximately 20,000,000 square feet additional. The base hospital centers at Mars and Mesves, each with 4,000-bed convalescent camps, are typical of the large scale upon which hospital accommodations were provided. The hospital city at Mars, of 700 buildings, covered a ground space of 33 acres and included the usual road, water, sewerage, and lighting facilities of a municipality.

16. Advantages of economy and increased mobility caused the adoption of the system of billeting troops. Billeting areas were chosen near the base ports, along the line of communications, and in the advanced zone, as strategical requirements dictated. The system was not altogether satisfactory, but with the number of troops to be accommodated no other plan was practicable. Demountable barracks were used for shelter to supplement lack of billets, 16,000 barracks of this type being erected, particularly at base ports where large camps were necessary. Stables at remount stations were built for 43,000 animals. Other construction included refrigerating plants, such as the one at Gievres with a capacity of 6,500 tons of meat and 500 tons of ice per day; and mechanical bakeries like that at Is-sur-Tille with capacity of 800,000 pounds of bread per day. If the buildings constructed were consolidated, with the width of a standard barrack, they would reach from St. Nazaire across France to the Elbe River in Germany, a distance of 730 miles.

In connection with construction work, the Engineer Corps engaged in extensive forestry operations, producing 200,000,000 feet of lumber, 4,000,000 railroad ties, 300,000 cords of fuel wood, 35,000 pieces of piling, and large quantities of miscellaneous products.

TRANSPORTATION CORPS.

17. The Transportation Corps as a separate organization was new to our Army. Its exact relation to the supply departments was conceived to be that of a system acting as a common carrier operating its own ship and rail terminals. The equipment and operation of port terminals stands out as a most remarkable achievement. The amount of tonnage handled at all French ports grew slowly, reaching about 17,000 tons daily at the end of July, 1918. An emergency then developed as a result of the critical military situation, and the capacity of our terminals was so efficiently increased that, by November 11, 45,000 tons were being handled daily.

The French railroads, both in management and material, had dangerously deteriorated during the war. As our system was superimposed upon that of the French it was necessary to provide them with additional personnel and much matériel. Experienced American railroad men brought into our organization, in various practical capacities, the best talent in the country, who, in addition to the management of our own transportation, materially aided the French. The relation of our Transportation Corps to the French railroads and to our own supply departments presented many difficulties, but these were eventually overcome and a high state of efficiency established.

18. It was early decided, as expedient for our purposes, to use American rolling stock on the French railroads, and approximately 20,000 cars and 1,500 standard-gauge locomotives were brought from the United States and assembled by our railroad troops. We assisted the French by repairing with our own personnel 57,385 French cars, and 1,947 French locomotives. The lack of rolling stock for Allied use was at all times a serious handicap, so that the number of cars and locomotives built and repaired by us was no small part of our contribution to the Allied cause.

QUARTERMASTER CORPS.

19. The Quartermaster Corps was able to provide a larger tonnage of supplies from the States than any of the great supply departments. The operations of this corps were so large and the activities so numerous that they can best be understood by a study of the report of the commanding general Services of Supply.

The Quartermaster Corps in France was called upon to meet conditions never before presented, and it was found advisable to give it relief. Transportation problems by sea transport and by rail were handled by separate corps organized for that purpose, and already described. Motor transport was also placed under an organization of its own. The usual routine supplies furnished by this department reached enormous proportions. Except for the delay early in 1918 in obtaining clothing and the inferior quality of some that was furnished, and an occasional shortage in forage, no army was ever better provided for. Special services created under the Quartermaster Corps included a Remount Service, which received, cared for, and supplied animals to troops; a Veterinary Service, working in conjunction with the remount organization; an Effects Section and Baggage Service; and a Salvage Service for the recovery and preparation for reissue of every possible article of personal equipment. Due to the activities of the Salvage Service, an estimated saving of \$85,000,000 was realized, tonnage and raw material were

conserved, and what in former wars represented a distinct liability was turned into a valuable asset.

The Graves Registration Service, also under the Quartermaster Corps, was charged with the acquisition and care of cemeteries, the identification and reburial of our dead, and the correspondence with relatives of the deceased. Central cemeteries were organized on the American battle fields, the largest being at Romagne-sous-Montfaucon and at Thiaucourt in the Woevre. All territory over which our troops fought was examined by this service, and, generally speaking, the remains of our dead were assembled in American cemeteries and the graves marked with a cross or six-pointed star and photographed. A few bodies were buried where they fell or in neighboring French or British cemeteries. Wherever the soldier was buried, his identification tag, giving his name and Army serial number, was fastened to the marker. A careful record was kept of the location of each grave.

SIGNAL CORPS.

20. The Signal Corps supplied, installed, and operated the general service of telephone and telegraphic communications throughout the Zone of the Armies, and from there to the rear areas. At the front it handled radio, press, and intercept stations; provided a radio network in the Zone of Advance; and also managed the meteorological, pigeon, and general photographic services. Our communication system included a cable across the English Channel, the erection of 4,000 kilometers of telephone and telegraph lines on our own poles, and the successful operation of a system with 215,500 kilometers of lines.

MOTOR TRANSPORT CORPS.

21. The quantity and importance of gasoline-engine transportation in this war necessitated the creation of a new service known as the Motor Transport Corps. It was responsible for setting up motor vehicles received from America, their distribution, repair, and maintenance. Within the zone of the Services of Supply, the Motor Transport Corps controlled the use of motor vehicles, and it gave technical supervision to their operation in the Zone of the Armies. It was responsible for the training and instruction of chauffeurs and other technical personnel. Due to the shortage of shipments from America, a large number of trucks, automobiles, and spare parts had to be purchased in France.

RENTING, REQUISITION, AND CLAIMS SERVICE.

22. A Renting, Requisition, and Claims Service was organized in March, 1918, to procure billeting areas, supervise the quartering of

troops with an organization of zone and town majors, and to have charge of the renting, leasing, and requisitioning of all lands and buildings required by the American Expeditionary Forces. Under the provisions of an act of Congress, approved in April, 1918, the Claims Department was charged with the investigation, assessment, and settlement of all claims "of inhabitants of France or any other European country not an enemy or ally of an enemy" for injuries to persons or damages to property occasioned by our forces. The procedure followed was in accordance with the law and practice of the country in question. The efficient administration of this service had an excellent effect upon the people of the European countries concerned.

23. The various activities of the Services of Supply which, at its height on November 11, 1918, reached a numerical strength in personnel of 668,312, including 23,772 civilian employees, can best be summed up by quoting the telegram sent by me to Maj. Gen. James G. Harbord, the Commanding General, Services of Supply, upon my relinquishing personal command of the First Army:

"I want the S. O. S. to know how much the First Army appreciated the prompt response made to every demand for men, equipment, supplies, and transportation necessary to carry out the recent operations. Hearty congratulations. The S. O. S. shares the success with it."

MUNITIONS.

ORDNANCE.

24. Our entry into the war found us with few of the auxiliaries necessary for its conduct in the modern sense. The task of the Ordnance Department in supplying artillery was especially difficult. In order to meet our requirements as rapidly as possible, we accepted the offer of the French Government to supply us with the artillery equipment of 75's, 155 mm. howitzers and 155 G. P. F. guns from their own factories for 30 divisions. The wisdom of this course was fully demonstrated by the fact that, although we soon began the manufacture of these classes of guns at home, there were no guns of American manufacture of the calibres mentioned on our front at the date of the armistice. The only guns of these types produced at home which reached France before the cessation of hostilities were one hundred and nine 75 mm. guns. In addition, twenty-four 8-inch howitzers from the United States reached our front and were in use when the Armistice was signed. Eight 14-inch naval guns of American manufacture were set up on railroad mounts, and most of these were successfully employed on the Meuse-Argonne front under the efficient direction of Admiral Plunkett of the Navy.

AVIATION.

25. In aviation we were entirely dependent upon our Allies, and here again the French Government came to our aid until our own program could be set under way. From time to time we obtained from the French such planes for training personnel as they could provide. Without going into a complete discussion of aviation matériel, it will be sufficient to state that it was with great difficulty that we obtained equipment even for training. As for up-to-date combat planes, the development at home was slow, and we had to rely upon the French who provided us with a total of 2,676 pursuit, observation, and bombing machines. The first aeroplanes received from home arrived in May, and altogether we received 1,379 planes of the De Havilland type. The first American squadron completely equipped by American production, including aeroplanes, crossed the German lines on August 7, 1918. As to our aviators, many of whom trained with our Allies, it can be said that they had no superiors in daring and in fighting ability. During the battles of St. Mihiel and Meuse-Argonne our aviators excelled all others. They have left a record of courageous deeds that will ever remain a brilliant page in the annals of our Army.

TANKS.

26. In the matter of tanks, we were compelled to rely upon both the French and the English. Here, however, we were less fortunate for the reason that our Allies barely had sufficient tanks to meet their own requirements. While our Tank Corps had limited opportunity, its fine personnel responded gallantly on every possible occasion and showed courage of the highest order. We had one battalion of heavy tanks engaged on the English front. On our own front we had only the light tanks, and the number available to participate in the last great assault of November 1 was reduced to 16 as a result of the previous hard fighting in the Meuse-Argonne.

CHEMICAL WARFARE SERVICE.

27. The Chemical Warfare Service represented another entirely new departure in this war. It included many specialists from civil life. With personnel of a high order, it developed rapidly into one of our most efficient auxiliary services. While the early employment of gas was in the form of clouds launched from special projectors, its use later on in the war was virtually by means of gas shells fired by the light artillery. One of the most important duties of the Chemical Warfare Service was to insure the equipment of our troops with a safe and comfortable mask, and the instruction of the personnel in the use of this protector. Whether or

not gas will be employed in future wars is a matter of conjecture, but the effect is so deadly to the unprepared that we can never afford to neglect the question.

ADMINISTRATION.

MEDICAL AND SANITARY CONDITIONS.

28. The general health of our armies under conditions strange and adverse in many ways to our American experience and mode of life was marvelously good. The proportionate number of men incapacitated from other causes than battle casualties and injuries was low. Of all deaths in the American Expeditionary Forces (to September 1, 1919) totaling 81,141, there were killed in action, 35,556; died of wounds received in battle, 15,130; other wounds and injuries, 5,669; and died of disease, 24,786. Therefore, but little over two-sevenths the total loss of life in the American Expeditionary Forces was caused by disease.

Our armies suffered from the communicable diseases that usually affect troops. Only two diseases have caused temporarily excessive sick rates, epidemic diarrhea and influenza, and of these influenza only, due to the fatal complicating pneumonia, caused a serious rise in the death rate. Both prevailed in the armies of our Allies and enemies and in the civilian population of Europe.

Venereal disease has been with us always, but the control was successful to a degree never before attained in our armies, or in any other army. It has been truly remarkable when the environment in which our men lived is appreciated. The incidence of venereal disease varied between 30 and 60 per thousand per annum, averaging under 40. Up to September, 1919, all troops sent home were free from venereal disease. The low percentage was due largely to the fine character of men composing our armies.

29. Hospitalization represented one of the largest and most difficult of the medical problems in the American Expeditionary Forces. That the needs were always met and that there was always a surplus of several thousand beds, were the results of great effort and the use of all possible expedients to make the utmost of resources available. The maximum number of patients in hospital on any one day was 193,026, on November 12, 1918.

Evacuation of the sick and wounded was another difficult problem, especially during the battle periods. The total number of men evacuated in the Zone of the Armies was 214,467, of whom 11,281 were sent in hospital trains to base ports. The number of sick and wounded sent to the United States up to November 11, 1918, was 14,000. Since the Armistice, 103,028 patients have been sent to the United States.

30. The Army and the Medical Department were fortunate in obtaining the services of leading physicians, surgeons, and specialists in all branches of medicine from all parts of the United States, who brought the most skillful talent of the world to the relief of our sick and wounded. The Army Nurse Corps deserves more than passing comment. These women, working tirelessly and devotedly, shared the burden of the day to the fullest extent with the men, many of them submitting to all the dangers of the battle front.

RECORDS, PERSONNEL, AND MAIL SERVICE.

31. New problems confronted the Adjutant General's Department in France. Our great distance from home necessitated records, data, and executive machinery to represent the War Department as well as our forces in France. Unusually close attention was paid to individual records. Never before have accuracy and completeness of reports been so strictly insisted upon. Expedients had to be adopted whereby the above requirements could be met without increasing the record and correspondence work of combat units. The organization had to be elastic to meet the demands of any force maintained in Europe.

A Statistical Division was organized to collect data regarding the special qualifications of all officers and to keep an up-to-date record of the location, duties, health, and status of every officer and soldier, nurse, field clerk, and civilian employee, as well as the location and strength of organizations. The Central Records Office at Bourges received reports from the battle front, evacuation and base hospitals, convalescent-leave areas, reclassification camps, and base ports, and prepared for transmission to the War Department reports of individual casualties. Each of the 299,599 casualties was considered as an individual case. A thorough investigation of the men classed as "missing in action" reduced the number from 14,000 at the signing of the Armistice to 22 on August 31, 1919.

32. In addition to printing and distributing all orders from General Headquarters, the Adjutant General's Department had charge of the delivery and collection of official mail and finally of all mail. The Motor Dispatch Service operated 20 courier routes, over 2,300 miles of road, for the quick dispatch and delivery of official communications. After July 1, 1918, the Military Postal Express Service was organized to handle all mail, official and personal, and operated 169 fixed and mobile post offices and a railway post-office service.

While every effort was exerted to maintain a satisfactory mail service, frequent transfers of individuals, especially during the hurried skeletonizing of certain combat divisions, numerous errors in

addresses, hasty handling, and readdressing of mail by regimental and company clerks in the Zone of Operations, and other conditions incident to the continuous movement of troops in battle, made the distribution of mail an exceedingly difficult problem.

INSPECTION—DISCIPLINE.

33. The Inspector General's Department, acting as an independent agency not responsible for the matters under its observation, made inspections and special investigations for the purpose of keeping commanders informed of local conditions. The inspectors worked unceasingly to determine the manner in which orders were being carried out, in an effort to perfect discipline and team play.

The earnest belief of every member of the Expeditionary Forces in the justice of our cause was productive of a form of self-imposed discipline among our soldiers which must be regarded as an unusual development of this war, a fact which materially aided us to organize and employ in an incredibly short space of time the extraordinary fighting machine developed in France.

Our troops generally were strongly imbued with an offensive spirit essential to success. The veteran divisions had acquired not only this spirit, but the other elements of fine discipline. In highly trained divisions, commanders of all grades operate according to a definite system calculated to concentrate their efforts where the enemy is weakest. Straggling is practically eliminated; the Infantry, skillful in fire action and the employment of cover, gains with a minimum of casualties; the battalion, with all of its accompanying weapons, works smoothly as a team in which the parts automatically assist each other; the Artillery gives the Infantry close and continuous support; and unforeseen situations are met by prompt and energetic action.

This war has only confirmed the lessons of the past. The less experienced divisions, while aggressive, were lacking in the ready skill of habit. They were capable of powerful blows, but their blows were apt to be awkward—teamwork was often not well understood. Flexible and resourceful divisions can not be created by a few maneuvers or by a few months' association of their elements. On the other hand, without the keen intelligence, the endurance, the willingness, and enthusiasm displayed in the training area, as well as on the battle field, the successful results we obtained so quickly would have been utterly impossible.

MILITARY JUSTICE.

34. The commanders of armies, corps, divisions, separate brigades, and certain territorial districts, were empowered to appoint general courts-martial. Each of these commanders had on his staff an officer

of the Judge Advocate General's Department, whose duty it was to render legal advice and to assist in the prompt trial and just punishment of those guilty of serious infractions of discipline.

Prior to the signing of the Armistice, serious breaches of discipline were rare, considering the number of troops. This was due to the high sense of duty of the soldiers and their appreciation of the seriousness of the situation. In the period of relaxation following the cessation of hostilities, infractions of discipline were naturally more numerous, but not even then was the number of trials as great in proportion to the strength of the force as is usual in our service.

35. It was early realized that many of the peace-time methods of punishment were not the best for existing conditions. In the early part of 1918, it was decided that the award of dishonorable discharge of soldiers convicted of an offense involving moral turpitude, would not be contemplated, except in the most serious cases. To remove these soldiers temporarily from their organizations, division commanders were authorized to form provisional temporary detachments to which such soldiers could be attached. These detachments were retained with their battalions so that offenders would not escape the dangers and hardships to which their comrades were subjected. Wherever their battalion was engaged, whether in front-line trenches or in back areas, these men were required to perform hard labor. Only in emergency were they permitted to engage in combat. Soldiers in these disciplinary battalions were made to understand that if they acquitted themselves well, they would be restored to full duty with their organizations.

All officers exercising disciplinary powers were imbued with the purpose of these instructions and carried them into effect. So that nearly all men convicted of military offenses in combat divisions remained with their organizations and continued to perform their duty as soldiers. Many redeemed themselves by rendering valiant service in action and were released from the further operation of their sentences.

36. To have the necessary deterrent effect upon the whole unit, courts-martial for serious offenses usually imposed sentences considerably heavier than would have been awarded in peace times. Except where the offender earned remission at the front, these sentences stood during hostilities. At the signing of the Armistice, steps were at once taken to reduce outstanding sentences to the standards of peace time.

PROVOST MARSHAL GENERAL'S DEPARTMENT.

37. On July 20, 1917, a Provost Marshal General was appointed with station in Paris, and later the department was organized as an administrative service with the Provost Marshal General func-

tioning under the First Section, General Staff. The Department was developed into four main sections—the Military Police Corps which served with divisions, corps, and armies and in the sections of the Services of Supply; the Prisoner of War Escort Companies; the Criminal Investigation Department; and the Circulation Department. It was not until 1918 that the last-mentioned department became well trained and efficient. On October 15, 1918, the strength of the Corps was increased to 1 per cent of the strength of the American Expeditionary Forces, and provost marshals for armies, corps, and divisions were provided.

The military police of the American Expeditionary Forces developed into one of the most striking bodies of men in Europe. Wherever the American soldier went, there our military police were on duty. They controlled traffic in the battle zone, in all villages occupied by American troops, and in many cities through which our traffic flowed; they maintained order, so far as the American soldiers were concerned, throughout France and in portions of England, Italy, Belgium, and occupied Germany. Their smart appearance and military bearing and the intelligent manner in which they discharged their duties left an excellent impression of the typical American on all with whom they came in contact.

PART IV.

MISCELLANEOUS SUBJECTS.

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PART IV.

MISCELLANEOUS SUBJECTS.

PRISONERS OF WAR.

1. All prisoners taken by the American troops were kept at least 30 kilometers behind our lines under guard by the Provost Marshal General's Department, except wounded or sick prisoners who were immediately sent to hospitals for treatment. Arrangements were made with the French and British that prisoners taken by our units operating with them should be sent to American enclosures. The Provost Marshal General was instructed to follow the principles of The Hague and the Geneva conventions in the treatment of prisoners, although these were not recognized by the United States as binding in the present war. Prisoners were organized into labor companies, and were employed on work which had no distinct bearing on military operations. The officer prisoners of war were accorded the same treatment as received by American officers confined in Germany. A Prisoner of War Information Bureau was established in the Central Records Office. Under a mutual understanding with the German Government, payments were made to prisoners in the form of credits, and, subject to censorship, they were allowed to send and receive letters and packages. Religious meetings were held by prisoner chaplains, assisted by our Army chaplains and welfare workers.

2. From June, 1918, to the end of March, 1919, a total of 48,280 enemy prisoners were handled by the Provost Marshal General's Department, of whom 93 died and 73 escaped and were not recaptured. At the request of the French Government, 516 prisoners, natives of Alsace-Lorraine, were released after examination by a French commission. In accordance with the provisions of the Geneva convention, 59 medical officers and 1,783 men of the sanitary personnel, including 333 members of the German Red Cross, were repatriated. On April 9, 1919, we commenced to repatriate enemy prisoners who were permanently unfit for further military duty and those who could not perform useful labor.

3. Through the Berlin Red Cross and the International Red Cross at Geneva, an American Red Cross committee at Berne received lists of all American prisoners taken by the German troops, to each of whom, when located, was sent a package containing food, tobacco,

clean underclothing and toilet articles, and thereafter two packages a week. By a system of return post cards, it was determined that 85 per cent of these packages were received.

As soon as the Armistice was signed the Germans released large numbers of Allied prisoners who immediately started toward the Allied lines. Four American regional replacement departments were established, to which all returning Americans were sent until proper records could be made. Those in good physical condition were sent to their commands, while the others were sent to hospitals or to leave areas for a rest.

An Allied commission was formed in Berlin early in December, 1918, for the repatriation of Allied prisoners, with representatives from each of the American, British, French, and Italian Armies. American prisoners were evacuated through Switzerland in fully equipped trains, including hospital cars, provided by the Swiss Government and paid for by our Government. These were met by American trains at the Swiss border. It was planned to withdraw all our prisoners by this route, but a number had already been withdrawn through the northern ports and taken to England in British ships.

The Allied Commission obtained a statement of moneys paid Americans while in German prisons; investigated complaints concerning treatment of Americans; obtained possession of effects of prisoners who had died in captivity, or which had been left behind by those repatriated; and also located the graves of the American dead.

4. On November 11, 1918, there were 248 American officers and 3,302 men in the hands of the Germans, all of whom were evacuated by February 5, 1919. None of our prisoners were condemned to death, although 1 officer and 20 men died in captivity.

5. An Inter-Allied agreement on January 13, 1919, created a commission for the control of Russian prisoners in Germany. The British and American representatives, aided by small unarmed detachments, were charged with the administration of the Russian prison camps, and succeeded in discharging their duties despite the civil disorders in Germany.

Early in January, 1919, the Red Cross outlined a plan to send a commission to Germany to assist in caring for and feeding Russian prisoners, and an American officer was detailed to assist and accompany this commission. The Red Cross being financially unable to furnish the necessary food, arrangements were finally made with the French Government to furnish funds for its purchase from our Army stores, without any responsibility being assumed by the Army, as was desired by the Allied Food Commission. Such supplies as could be spared by the Army were sold to the French, and American officers were detailed to assist in their distribution. On April 10, 1919, the Supreme Allied War Council decided to give the German

Government complete freedom in repatriating Russian prisoners of war, stipulating only that none should be repatriated by force, and that all who left must be provided with sufficient food for the journey.

CIVIL ADMINISTRATION OF OCCUPIED TERRITORY.

6. To insure law and order, it was necessary that an American civil administration be created in the occupied territory. Different policies were adopted toward Luxemburg and occupied Germany, the former being a disarmed neutral and the latter occupied enemy territory. In both regions we issued proclamations defining our attitude toward the inhabitants.

In accordance with the precedent of our Government under similar circumstances, the local civil government remained in full possession of its former power, and retained jurisdiction over all civil matters. The organization of our civil administration in occupied territory provided for the control of civil affairs by the Officer in Charge of Civil Affairs in Occupied Territory, under whom Army, corps, and division commanders detailed suitable officers in local charge of civil matters. In the Grand Duchy of Luxemburg, civil affairs were regulated by a corresponding representative with an office in the city of Luxemburg.

7. The principle of requisitioning supplies was exercised extensively throughout the area, always under central control and without abuse of the privilege. Under a board of appraisal payment was made for all property requisitioned, the money being obtained from the German Government under the terms of the Armistice. Food and forage were not requisitioned, and during most of the period of occupation our officers and men were not allowed to purchase any German food and were forbidden to eat in the restaurants and cafés.

In Luxemburg, billeting arrangements and payment therefor were provided for by an agreement with the Government of Luxemburg.

Under instructions from the State Department, the interests of American citizens found in occupied Germany were referred to the American Embassy in Paris: in Luxemburg to the American Legation at The Hague.

8. We insisted upon the Germans maintaining all public utilities. After being inspected, measures were taken to assure priority of fuel supply in case of coal shortage due to strikes in the Ruhr and Saar districts or other causes. One of our chief problems was the maintenance and repair of roads and highways, and this at first necessitated the employment of soldier labor. As soon as possible a satisfactory system of road preservation and improvement was inaugurated, utilizing German civil labor.

To control and supervise the movement of funds and securities, all banks and banking houses were required to submit monthly reports. Trade and blockade regulations were controlled through the American Section of the Inter-Allied Economic Committee.

9. The Civil Administration issued instructions relative to courts. Army, corps, and divisional commanders were authorized to convene military commissions and appoint superior provost courts for their respective districts; and commanding officers of each city, town or canton, appointed an inferior provost court. All of these courts were for the trial of offenses against the laws of war or the Military Government. Our legal machinery was simple, and successful results in maintaining law and order were due to uniform and strict enforcement of such few regulations as proved necessary.

Strict censorship was maintained over postal, telephone and telegraphic communications. Passes and circulation were first handled by the Department of Civil Affairs, but on January 24, 1919, the Third Army took charge of those matters.

In connection with the reconstruction work in France and Belgium, the Department of Civil Affairs prepared a record of all recovered stolen property and measures were taken to protect it against deterioration or unauthorized removal.

10. The fraternization problem was sharply raised by the sudden transition from the rigors of war conditions in France to the comforts of undisturbed German cities and homes, but a realization by our troops of their position in enemy territory and of their duty to maintain the dignity of their own country reduced infractions of rules on the subject to a minimum.

EXECUTION OF ARMISTICE TERMS.

11. The first Armistice agreement provided for supervision by a Permanent International Armistice Commission to function under the authority of the Commander-in-Chief of the Allied Armies. The United States, Great Britain, Belgium, France, Italy and Germany were represented on the Permanent International Armistice Commission. The chairmen of this commission and of the five main committees were French. These committees were organized to care specifically for the work in connection with material, transportation, prisoners of war, entretien, and restitution. The United States was represented on each of these main committees.

12. The Germans unsuccessfully attempted to enter the Permanent International Armistice Commission on the basis of negotiation. Many adjustments were made because of the difficulties under which the German authorities were working, but, in general, they were held strictly to the spirit of the terms of the Armistice agreement.

Time of delivery was often extended, but penalties were imposed for failure to comply with the conditions. All aeroplanes were not obtained until a penalty was imposed of 20 horses for each undelivered plane. Evacuation of occupied territory, and repatriation of civilian inhabitants and of prisoners of war, were begun immediately and carried out promptly.

13. In the distribution among the Allied Armies of ordnance and aeroplanes surrendered by the enemy, the Belgian Army received one-tenth, American Army two-tenths, British Army three-tenths, and French Army four-tenths. Our share was 720 field guns, 534 heavy guns, 589 trench mortars, 10,356 machine guns and 340 aeroplanes. Railway rolling stock was divided according to the needs of the railway systems serving the different armies.

14. The question of expense of maintenance of the armies of occupation caused considerable discussion among the Allies and protests from the Germans. This was due to the diversity of opinion as to the items properly chargeable to the expense of an army of occupation. My policy was that, pending final settlement by the Peace Conference, Germany would be liable for all expenses of the American Army of Occupation; that any payments made by Germany for this purpose were to be considered as partial payments on account of the whole sum, and not as a liquidation of any specific expenses. Money was deposited in Coblenz banks to the credit of the United States, in amounts notified as necessary, to cover all expenditures made in the occupied area. The total expense as calculated by the different Allied Armies, before any of our troops were withdrawn, was based on the effective strength as shown by their Tables of Organization, and appears as follows:

Armies.	Officers.	Men.	Horses.	Cost per month in francs.
French.....	11,570	35,500	116,100	175,948,815.00
Belgian.....	1,834	39,430	11,600	30,195,142.60
British.....	12,000	240,000	70,000	127,935,000.00
United States.....	12,358	275,617	58,755	269,068,184.10
Total.....				603,147,141.70

UNITED STATES LIQUIDATION COMMISSION.

15. In February, 1919, upon my recommendation, the Secretary of War appointed the United States Liquidation Commission, War Department, which had charge of the liquidation of our affairs in France, the sale of our property and installations and the settlement of claims exclusive of those arising out of torts, which were handled by the Renting, Requisition and Claims Service. While not under my supervision, the Liquidation Commission played such an important part in the closing chapter of our activities that some

mention of it should be made in this report. With the dissolution of the American Expeditionary Forces we were confronted with the problem of disposing of large port and other installations and immense quantities of transportation, matériel, supplies and equipment. Much of this was of an immovable nature and the shipping situation forbade the transfer to the United States of most of the movable effects. There was little or no demand for many of the articles to be disposed of, and the expense of maintaining a force of caretakers until the market improved would have been prohibitive. The successful negotiations of the Commission led to the liquidation of our affairs with France by the payment of a lump sum to the United States by the French Government.

RELATIONS WITH THE ALLIES.

16. Our troops arrived in Europe after France and Great Britain had been fighting desperately for nearly three years, and their reception was remarkable in its cordiality. The resources of our Allies in men and material had been taxed to the limit, but they always stood ready to furnish us with needed supplies, equipment and transportation when at all available. We were given valuable assistance and cooperation in our training program by both the French and British armies, and when the shortage of labor personnel in our forces became acute the French Government rendered material assistance in the solution of this problem.

It was our good fortune to have a year in France to organize and train our forces. When our troops entered the battle the veteran soldiers of France and England gave them moral and physical support. The Artillery of our Allies often supported the advance of American troops; British and French tanks frequently cooperated with our Infantry; and their aviators fought in the air to assist the American soldier.

Throughout France our troops have been intimately associated with the French people, particularly the French peasant, and the relations growing out of these associations assure a permanent friendship between the two peoples. The small force of Americans serving in Italy was accorded a warm welcome and established with the Italian people the most friendly relations. The hospitable reception of those of our forces who passed through England has impressed upon us how closely common language and blood have brought together the British and ourselves.

The cooperation of our soldiers with the French, British, Belgians and Italians was decisive in bringing the war to a successful conclusion, and will have an equally decisive effect in welding together the bonds of sympathy and good will among the peoples of these nations and ourselves.

WELFARE WORK.

ALLIED FOOD COMMISSION.

17. At the request of the Allied Food Commission a selected personnel of 320 officers and 464 men was placed at the disposal of the Commission. There was no other American personnel in Europe or elsewhere available for this necessary work. Our officers were sent to various countries in charge of food distribution, and were everywhere received with the utmost friendliness. These officers and men, by their executive and administrative ability and their energetic resourcefulness, were in a large measure responsible for the manner in which these food supplies were delivered to the various peoples in central Europe during a period of civil unrest or complete disorder. By their disinterested conduct of this charitable work, they won for the American Army the admiration of the populations whom they served.

SOCIETIES.

18. In their respective spheres of activity the Red Cross and Y. M. C. A. undertook the burden of supplying the needs of the entire American Expeditionary Forces. Their efforts were in many respects limited by a lack of tonnage. But shortage in tonnage, transportation, or personnel, meant inability to carry out completely their appointed tasks; whereas with the smaller societies it meant inability to expand. In order to avoid duplication of effort, it was directed in August, 1917, that the Red Cross confine its activities to relief work, and the Y. M. C. A. to amusement and recreation. The Knights of Columbus and the Salvation Army were later given official recognition. The Y. W. C. A., Jewish Welfare Board and American Library Association conducted their activities through one of the established societies.

19. The American Red Cross maintained within our zones a system of "Line of Communication Canteens," which furnished refreshments and relief to troops in transit and became a valuable feature of the Red Cross work. The statistical work of the searchers attached to statistical sections and to hospitals obtained much information for relatives. This society also aided in locating American prisoners to whom it sent food from Switzerland.

20. To avoid depleting our personnel, the Y. M. C. A. agreed to operate our canteens and was at first allotted 208 ship-tons per 25,000 men per month to bring supplies from the United States, but the requirements of other services later made it necessary to reduce this allotment to 100 tons. This materially reduced the valuable service the Y. M. C. A. might have rendered in this work. The ter-

mination of hostilities made it possible to relieve the society of this responsibility.

21. The need of greatly expanded welfare work after hostilities, such as athletics and education was at once recognized, and the cooperation of the welfare societies in all these activities was of inestimable value. Immediately after the Armistice steps were taken to provide diversion and entertainment for our troops. Entertainment officers were appointed in all units, and the Y. M. C. A. Entertainment Department furnished professionals and acted as a training and booking agency for soldier talent. Approximately 650 "soldier shows" were developed, which entertained hundreds of thousands of soldiers, who will remember this as one of the pleasant and unique enterprises of the American Expeditionary Forces.

The athletic program in the spring of 1919 culminated in the Inter-Allied games in June, held in the concrete stadium erected by our Engineers near Paris, the necessary funds being contributed by the Y. M. C. A. In number of participants and quality of entry, these games probably surpassed any of the past Olympic contests.

LEAVES AND LEAVE AREAS.

22. A leave system announced in general orders provided for a leave of seven days every four months, but it was necessary to suspend the privilege during active operations. In the leave areas free board and lodging at first-class hotels were provided for soldiers, and the Y. M. C. A. furnished recreational and amusement facilities. A number of new areas were opened by the Services of Supply immediately after the Armistice, improved transportation accommodations were eventually secured, and arrangements were made whereby men could visit England, Belgium and Italy.

It was my desire that every man in the American Expeditionary Forces should be given an opportunity to visit Paris before returning to the United States, but the crowded condition of the city during the Peace Conference, transportation difficulties, and other reasons, made it necessary to limit the number of such leaves.

RELIGIOUS WORK.

23. Religious work in our Army before the war was carried on by chaplains, one to each regiment. To meet the greatly increased size of regiments, legislation was recommended by me to provide not less than one chaplain for each 1,200 men. Although such act was passed in June, 1918, there was a continuous shortage of chaplains with the fighting units and in the hospitals and camps in the rear areas. This was largely met through the ready cooperation of the Welfare Societies who sent ministers and priests where most needed. Reli-

gious workers in the Y. M. C. A. and Knights of Columbus and Red Cross also aided in the work, the Red Cross sending chaplains to the States with units in many instances.

The religious work was directed and coordinated by a Board of Chaplains at general headquarters, of which Bishop Charles H. Brent was the head. With great devotion to duty this work was maintained despite a lack of transportation and other facilities. Chaplains, as never before, became the moral and spiritual leaders of their organizations, and established a high standard of active usefulness in religious work that made for patriotism, discipline and unselfish devotion to duty.

EDUCATIONAL WORK.

24. Prior to the Armistice, educational work was conducted through the organization of voluntary classes under the Y. M. C. A., the popular subjects studied being French language, French history, and the causes of the war. After the Armistice, measures were taken for a systematic organization of non-military educational training.

The formal school work began January 2nd, with post schools. Then divisional educational centers gave the equivalent of high-school instruction and specialized on vocational training. The American Expeditionary Forces University at Beaune carried on undergraduate and graduate work for the technical professions, while postgraduate work was provided by the entrance of our officers and soldiers into French and British universities. Special schools were organized to meet demands, such as the Practical Agricultural School at Allery and the Art Training Center at Paris, for painting, sculpture, architecture and interior decoration, advanced students being entered in the best ateliers of Paris. Active instruction was carried on in the base hospitals and convalescent camps.

An important branch of the educational work was the field institute of short courses and educational extension lectures, organized to meet conditions due to the rapid repatriation of our soldiers and the constant movement of troops. At least half of our forces were reached by this means with brief intensive courses in business, trades, engineering, agriculture, occupational guidance, and in citizenship.

25. On April 15 all educational work came under the complete control of the Training Section of the General Staff. The advantage of this change in management was at once apparent in the better coordination of the work of an excellent body of educators. The total attendance in the organized school system of the American Expeditionary Forces was 230,020, of which number 181,475 attended post schools, 27,250 educational centers, 8,528 the American Expeditionary Forces University at Beaune, 367 Art Training Centers, 4,144 Mechanical Trade Schools, 6,300 French universities and

1,956 British universities. The attendance upon the institute short courses totaled 690,000 more, and at the extension lectures 750,000, giving a grand total of attendance at all educational formations of 1,670,020.

The educational work in the American Expeditionary Forces was of undoubted value, not only in improving morale, but in concrete benefit to the individual officer and soldier. It demonstrated satisfactorily that a combined military and educational program can be carried out in the Army with little detriment to pure military training and with decided advantage to the individual.

STARS AND STRIPES.

26. The Stars and Stripes was a weekly newspaper conceived with the idea of increasing the morale of American troops by providing a common means of voicing the thought of the entire American Expeditionary Forces. Edited and managed by enlisted men who declined promotion, preferring to remain in the ranks in order better to interpret the spirit of the Army, it was a great unifying force and materially aided in the development of an esprit de corps. It lent loyal and enthusiastic support to Army athletics and to the educational program. In leading the men of our Army to laugh at their hardships, it was a distinct force for good and helped to create a healthy viewpoint. The campaign it conducted for the benefit of French orphans resulted in a fund of 2,250,000 francs.

APPRECIATION.

27. In this brief summary of the achievements of the American Expeditionary Forces it would be impossible to cite in detail the splendid ability, loyalty and efficiency that characterized the service of both combatant and non-combatant individuals and organizations. The most striking quality of both officers and men was the resourceful energy and common sense employed, under all circumstances, in handling their problems.

The highest praise is due the commanders of armies, corps and divisions, and their subordinate leaders, who labored loyally and ably toward the accomplishment of our task, suppressing personal opinions and ambitions in the pursuit of the common aim; and to their staffs, who developed, with battle experience, into splendid teams without superiors in any army.

To my Chiefs of Staff, Maj. Gen. James G. Harbord, who was later placed in command of the Services of Supply, and Maj. Gen. James W. McAndrew, I am deeply indebted for highly efficient services in a post of great responsibility.

The important work of the staff at General Headquarters in organization and administration was characterized by exceptional ability and a fine spirit of cooperation. No chief ever had a more loyal and efficient body of assistants.

The officers and men of the Services of Supply fully realized the importance of their duties, and the operations of that vast business system were conducted in a manner which won for them the praise of all. They deserve their full share in the victory.

The American civilians in Europe, both in official and private life, were decidedly patriotic and loyal, and invariably lent encouragement and helpfulness to the armies abroad.

The various societies, especially their women, including those of the theatrical profession, and our Army nurses, played a most important part in brightening the lives of our troops and in giving aid and comfort to our sick and wounded.

The Navy in European waters, under command of Admiral Sims, at all times cordially aided the Army. To our sister service we owe the safe arrival of our armies and their supplies. It is most gratifying to record that there has never been such perfect understanding between these two branches of the service.

Our armies were conscious of the support and cooperation of all branches of the Government. Behind them stood the entire American people, whose ardent patriotism and sympathy inspired our troops with a deep sense of obligation, of loyalty, and of devotion to the country's cause never equaled in our history.

Finally, the memory of the unflinching fortitude and heroism of the soldiers of the line fills me with greatest admiration. To them I again pay the supreme tribute. Their devotion, their valor and their sacrifices will live forever in the hearts of their grateful countrymen.

In closing this report, Mr. Secretary, I desire to record my deep appreciation of the unqualified support accorded me throughout the war by the President and yourself. My task was simplified by your confidence and wise counsel. I am, Mr. Secretary,

Very respectfully,

JOHN J. PERSHING,
*General, Commander-in-Chief,
American Expeditionary Forces.*

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